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KINGSTON ONTARIO CANADA













# QUEEN'S UNIVERSITY

KINGSTON, CANADA



INCORPORATED BY ROYAL CHARTER, IN 1841

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## CALENDAR

OF

## THE FACULTY OF ARTS

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A14  
153 ONE HUNDRED AND TWELFTH SESSION  
SESSION 1952 - 53

This Calendar is published some months before the opening of the session. Staff, courses, and regulations will probably be as announced, but the College reserves the right to make changes.



Queen's University  
Library

KINGSTON, ONTARIO

# QUEEN'S UNIVERSITY

KINGSTON, CANADA



INCORPORATED BY ROYAL CHARTER IN 1841

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## CALENDAR

OF

## THE FACULTY OF ARTS

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ONE HUNDRED AND TWELFTH SESSION

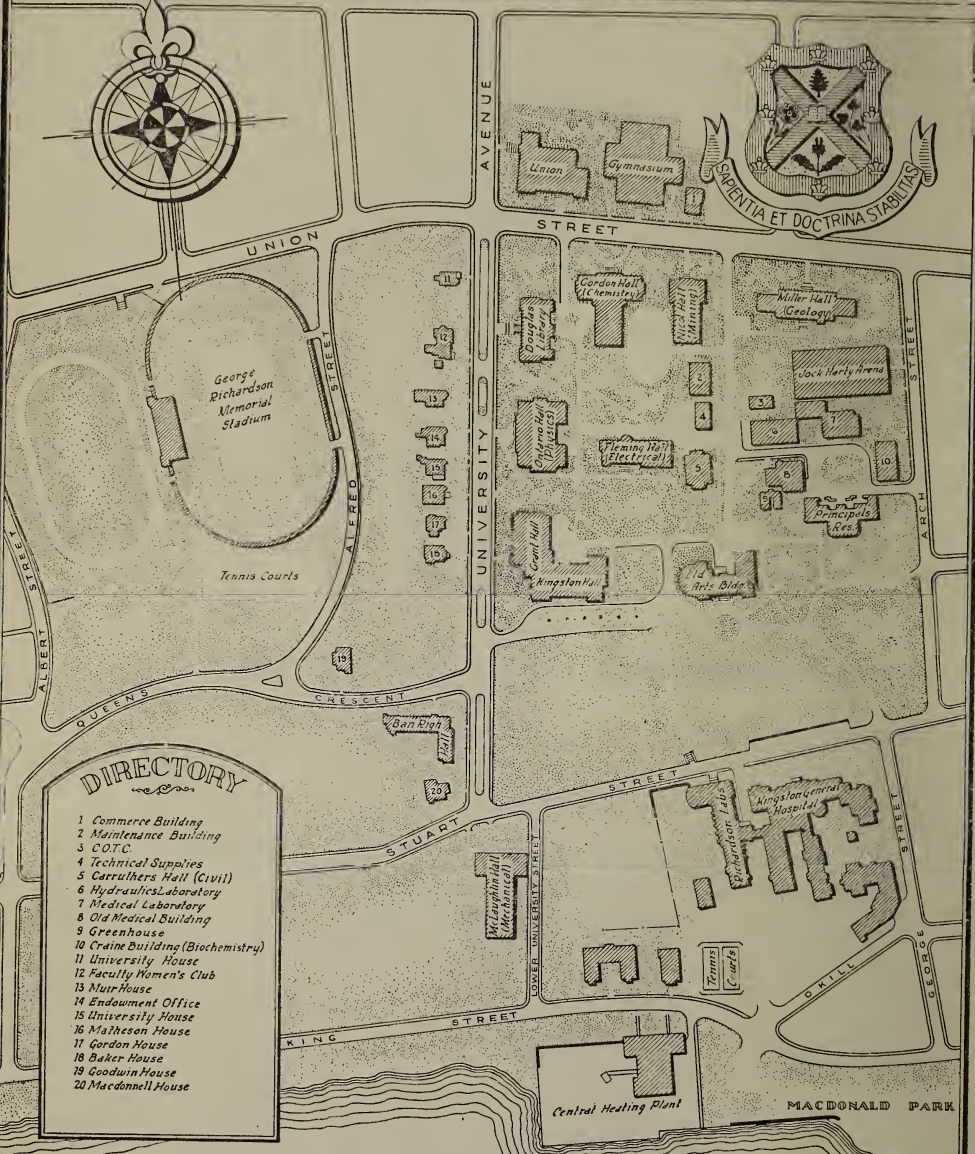
SESSION 1952 - 53



# QUEEN'S UNIVERSITY

## KINGSTON — — — ONTARIO

### PLAN OF BUILDINGS AND GROUNDS





## TABLE OF CONTENTS

	Page
Plan of Queen's University Grounds .....	2
Academic Year .....	5
Calendar .....	8
Time-table of Lectures .....	9
Time-table of Laboratory Work .....	10
History of the University .....	11
Government and Administration .....	13
The Board of Trustees .....	13
The University Council .....	14
The Senate .....	15
The Faculty Boards .....	16
Officers of Administration .....	16
The University .....	17
The Board of Trustees .....	19
The University Council .....	20
The Senate .....	21
Curators of the Library .....	22
Officers of Instruction .....	22
Emeritus Professors .....	22
Instructors in the Faculty of Arts .....	31
Part-time Instructors, Teaching Fellows, Assistants .....	32
Tutors .....	34
Equipment and Special Features .....	34
The Library .....	35
The Museums .....	35
The Laboratories .....	37
Facilities for Field Work .....	37
Facilities for Athletics .....	38
The Music Room .....	38
The University Concert Series .....	39
General Information .....	39
Degrees .....	40
Hoods .....	40
Council of Legal Education of Great Britain .....	40
The Students' Memorial Union .....	41
Co-operative Residences .....	41
Information for Women Students .....	42
Expenses .....	42
Boarding Houses .....	42
Physical Welfare of Students .....	44
Vaccination .....	44
Student Self-Government .....	44
Alma Mater Society Lecture .....	44
Fraternities .....	45
University Naval Training Division .....	45
Canadian Officers' Training Corps .....	45
R.C.A.F. Reserve University Flight .....	46
Employment Service .....	46
Registration .....	47
Admission to the Faculty of Arts .....	47
Admission by Matriculation .....	50
Admission of Ex-servicemen and Women .....	50
Admission by Equivalent Examination .....	51
Admission to Advanced Standing .....	52
Admission by Special Regulation .....	53
Regulations Regarding Extramural Work .....	60
Tabulated Statement of Summer and Winter Courses .....	62
The Summer School .....	62

	Page
Fees .....	6
Scholarships, Prizes and Medals .....	6
Matriculation Scholarships .....	6
Scholarships in Arts .....	6
Graduate Fellowships .....	8
Prizes .....	9
Medals .....	9
General Regulations .....	9
Special Students .....	9
Regulations Regarding Courses .....	9
Regulations Regarding Examinations .....	10
Courses of Study Leading to Degrees .....	10
General Explanations .....	10
Synopsis of Courses .....	10
Requirements for the Pass B.A. Degree .....	10
Honours Courses leading to the Degree of Bachelor of Arts .....	10
General Honours Course .....	10
Courses for Teachers' Certificates .....	11
Inspectors' Certificates .....	11
Combined Course in Arts and Physical and Health Education .....	11
Combined Course in Arts and Theology .....	11
Master of Arts .....	12
Doctor of Philosophy .....	12
Details of Courses of Instruction .....	123
Art .....	124
Bacteriology .....	124
Biochemistry .....	125
Biology .....	126
Chemistry .....	129
Classics .....	137
Drama .....	145
Economics, see Political and Economic Science.	155
English Language and Literature .....	158
French Language and Literature .....	163
Geological Sciences .....	168
German Language and Literature .....	179
Greek and Roman History, see Classics	
Greek Language and Literature, see Classics	
Hebrew Language and Literature .....	185
History .....	186
History, Greek and Roman, see Classics.	
Industrial Relations .....	195
Italian Language and Literature, see Spanish.	
Latin Language and Literature, see Classics	
Mathematics .....	197
Mineralogy, see Geological Sciences.	
Music .....	202
Philosophy .....	204
Physical Education .....	210
Physics .....	211
Political and Economic Science .....	218
Politics, see Political and Economic Science.	
Psychology .....	232
Religion .....	239
Roman History, Greek and, see Classics.	
Russian Language and Literature .....	241
Spanish Language and Literature .....	241
Index .....	249

## THE ACADEMIC YEAR\*

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THE HUNDRED AND TWELFTH SESSION of the University will begin on Thursday, September 25, 1952, at 8 a.m. Convocation will be held on Saturday, May 16, 1953 (this date is provisional).

1952

- JUNE 15—Last day for receiving applications for fall supplementals without extra fee.
- JUNE 25—Last day for receiving applications for fall supplementals with extra fee.
- JULY 2—Registration for Summer School. Registrations will not be accepted after July 2 unless special arrangements have been made before that date, and on these late registrations an additional fee of \$5 will be charged.
- JULY 3—Summer School opens at 8 a.m.
- JULY 10—Last day for receiving applications, from Summer School and extramural students, for August examinations, and degrees, without extra fee.
- JULY 20—Last day for receiving applications from Summer School and extramural students, for August examinations and degrees, with extra fee.
- AUGUST 15—Summer School closes.
- AUGUST 18—Arts supplemental examinations begin.
- SEPTEMBER 1—Last day for receiving applications for the Robert Bruce Bursaries and grants from the O. M. Montgomery Memorial Fund.
- SEPTEMBER 17—Last day for registration of extramural students without extra fee.
- SEPTEMBER 22—Registration in Arts begins on September 22 for students who are registering for the first time. This group includes students transferring from other institutions. A late fee will be charged after this date (\$5 on September 23 and \$3 a day thereafter).

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\* The term "Academic Year" used in connection with regulations and Courses of Study refers to the period extending from October 1 to September 30.

- SEPTEMBER 23—Registration of previously registered students in Honours Courses, in Physical and Health Education and graduate students.
- SEPTEMBER 24—Registration of previously registered students in Courses in Pass Arts and Commerce. A late fee will be charged after this date (\$5 on September 25 and \$3 a day thereafter).
- SEPTEMBER 24—Last day for registration of extramural students with an extra fee of \$5.
- SEPTEMBER 25—Classes in Arts open at 8 a.m.
- OCTOBER 4—Last day for registration of intramural students who have not previously obtained permission to register later.
- OCTOBER 6—Thanksgiving Day.
- OCTOBER 16—University Day.
- OCTOBER 25—Fall Convocation.
- DECEMBER 1—Last day for receiving applications and fees from extramural students for January examinations.
- Beginning of the mid-year examinations to be announced.
- DECEMBER 22—Christmas holidays begin at noon.

# 1953

- JANUARY 3—Examinations in half-courses of the first term begin.
- JANUARY 6—Classes in courses of the second term begin at 8 a.m.  
Last day for payment of the second instalment of fees without penalty.
- JANUARY 15—Last day for receiving applications from candidates for the M. C. Cameron Scholarship in Gaelic.
- FEBRUARY 10—Last day for receiving applications and fees from extramural students for the April examinations and for degrees.
- MARCH 1—Last day for receiving manuscripts for university prizes, applications for Research Fellowships, Leonard Fellowships, and Khaki University and other Scholarships.
- MARCH 15—Last day for receiving applications and fees for degrees from intramural students.
- APRIL 1—Written notice due at the Registrar's Office of candidates' intention to compete for Provincial Scholarships and Ontario Matriculation Scholarships.

APRIL 2—Classwork closes at noon.

APRIL 3—Good Friday.

APRIL 7—Examinations begin.

APRIL 10—Last day for extramural students to register for the summer session without extra fee.

APRIL 17—Last day for extramural students to add classes for the summer session with extra fee.

MAY 16—Convocation for conferring degrees, announcing honours, and distributing prizes and medals. (This date is provisional.)



## 1952

JANUARY							FEBRUARY							MARCH							APRIL						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
....	....	1	2	3	4	5	....	....	....	....	....	1	2	....	....	....	....	....	1	....	....	1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	2	3	4	5	6	7	8	6	7	8	9	10	11	12
13	14	15	16	17	18	19	10	11	12	13	14	15	16	9	10	11	12	13	14	15	13	14	15	16	17	18	19
20	21	22	23	24	25	26	17	18	19	20	21	22	23	16	17	18	19	20	21	22	20	21	22	23	24	25	26
27	28	29	30	31	....	....	24	25	26	27	28	29	....	23	24	25	26	27	28	29	27	28	29	30	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	30	31	....	....	....	....	....	....	....	....	....	....	....	....

MAY							JUNE							JULY							AUGUST						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
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4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
25	26	27	28	29	30	31	29	30	....	....	....	....	....	27	28	29	30	31	....	....	24	25	26	27	28	29	30
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SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER							
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....	....	1	2	3	4	5	6	....	....	....	1	2	3	4	....	....	....	....	....	1	....	....	1	2	3	4	5	6
7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8	7	8	9	10	11	12	13	
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20	
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22	21	22	23	24	25	26	27	
28	29	30	....	....	....	....	26	27	28	29	30	31	....	23	24	25	26	27	28	29	28	29	30	31	....	....	....	
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## 1953

JANUARY							FEBRUARY							MARCH							APRIL							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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4	5	6	7	8	9	10	11	8	9	10	11	12	13	14	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	18	15	16	17	18	19	20	21	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	25	22	23	24	25	26	27	28	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	....	....	....	....	....	....	....	....	29	30	31	....	....	....	....	26	27	28	29	30	....	....
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MAY							JUNE							JULY							AUGUST							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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3	4	5	6	7	8	9	10	7	8	9	10	11	12	13	5	6	7	8	9	10	11	2	3	4	5	6	7	8
10	11	12	13	14	15	16	17	14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15
17	18	19	20	21	22	23	24	21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	19	20	21	22
24	25	26	27	28	29	30	31	28	29	30	....	....	....	....	26	27	28	29	30	31	....	23	24	25	26	27	28	29
31	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	30	31	....	....	....	....	....

SEPTEMBER							OCTOBER							NOVEMBER							DECEMBER										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
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13	14	15	16	17	18	19	20	11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	20	21	
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27	28	29	30	....	....	....	....	25	26	27	28	29	30	31	29	30	....	....	....	....	....	27	28	29	30	31	....	....	....	....	
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# TIME-TABLE OF LABORATORY WORK

The numbers in parentheses indicate the hours

	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
Bacteriology .....	13 (1.30-4.30)	13 (1.30-4.30)	13 (1.30-4.30)	13 (1.30-4.30)	10 (1.30-4.30)	
Biochemistry .....		20 (1.30-4.30)	16 (1.30-4.30) 18 (1.30-4.30)	16 (1.30-4.30) 18 (1.30-4.30)		
Biology .....	1 (Sec. A, 1.30-3.30) 15 (1.30-4.30) 27 (1.30-5.30)	10 (1.30-4.30) 18 (1.30-4.30) 20 (9-11) 27 (1.30-5.30)	1 (Sec. B, 1.30-3.30) 16 (1.30-4.30) 17 (1.30-4.30) 20 (9-11)	11 (1.30-4.30) 20 (10-12) 26 (1.30-4.30)	19 (1.30-4.30) 20 (9-11) 26 (1.30-4.30)	
Chemistry .....	1 (1.30-3.30) 12 (1.30-4.30) 17 (1.30-4.30) 22 (1.30-4.30)	12 (1.30-4.30) 14 (1.30-4.30) 15a (1.30-4.30) 22 (1.30-4.30)	11 (1.30-4.30) 25 (1.30-4.30)	2 (1.30-3.30) 11 (1.30-4.30) 24 (1.30-4.30)	12 (1.30-4.30) 22 (1.30-4.30)	22 (9-12)
Geological Sciences .....	1 (1-4) 16a (1.30-4.30) 17b (1.30-5.30) 25a (1.30-3.30)	1 (1-4) 2 (1.30-3.30) or (3.30-5.30) 24 (1.30-3.30)	1 (1-4) 12 (3.30-5.30) 2nd term 14 (1.30-3.30) 17 (1.30-5.30)	10a (1.30-3.30) 12 (1.30-3.30) 2nd term 13b (3.30-5.30) 20 (3.30-5.30) 21 (1.30-3.30) or (3.30-5.30)	11 (1.30-3.30)	10a (9-11) 12 (9-11) 1st term
Physics .....		1 (1.30-3.30) 10a (1.30-3.30) 12b (1.30-3.30) 17b (1.30-3.30)	1 (1.30-3.30) 11 (1.30-4.30) or (2.30-5.30)	2 (1.30-3.30) 13b (1.30-3.30) or (3.30-5.30) 14a (1.30-3.30) or (3.30-5.30) 22 (1.30-4.30)	2 (1.30-3.30) 22 (1.30-4.30)	
Psychology .....				10b (2-5)		

Chemistry 13 — 6 hours per week — to be arranged.



## HISTORY OF THE UNIVERSITY

---

Queen's University owes its origin to the desire of the Synod of the Presbyterian Church in Canada, in connection with the Church of Scotland, for a ministry trained within the country. As early as 1832 the Provincial Government had been petitioned "to endow without delay an institution, or professorships, for the education and training of young men for the ministry in connection with the Synod". This and other representations failing of their object, steps were taken by the Synod to found a college at Kingston on the lines of the Scottish National Universities. On October 16, 1841, a Royal Charter was issued by Her Majesty Queen Victoria for the establishment of Queen's College, Kingston, and the first classes were opened in March, 1842, with the Rev. Dr. Liddell as Principal. Funds were provided in part by grants from the Presbyterian Church in Scotland and from the Canadian Government, and in part by liberal subscriptions from the friends of the young and growing University. In 1867-68, however, the withdrawal of the Provincial grant, and the failure of the Commercial Bank, almost brought financial disaster. But the crisis was met by the determination of Principal Snodgrass and other self-denying workers, chief among whom was Professor Mackerras. The country was canvassed for subscriptions, and as a result of the widespread interest aroused, \$113,000 was added to the endowment.

In 1877 Principal Snodgrass was succeeded by the Rev. G. M. Grant, who for a quarter of a century built with brilliant success upon the foundation laid by his predecessors. Under him the University gained rapidly in size and prestige. By 1881 Queen's had a new building, an enlarged staff, and a great increase of students. In 1887, as the result of an effort in commemoration of the Queen's Jubilee, \$250,000 was raised, resulting in further extension, and in the establishment of new professorships.

Principal Grant died in 1902, and was succeeded in the following year by the Very Rev. D. M. Gordon. In 1916, owing to ill-health, Principal Gordon resigned his position, but continued in office until the autumn of 1917, when the Rev. R. Bruce Taylor was appointed his successor. In 1930 Principal Taylor resigned his position to live abroad and Dr. J. C. Connell was appointed Acting Principal. He held this position for four months, until October, when W. Hamilton Fyfe, Headmaster of Christ's Hospital, England, and formerly Fellow of Merton College, Oxford, was installed as Principal of the University. Dr. Fyfe resigned in 1936 to accept the Principalship of the University of Aberdeen. Dr. Fyfe was succeeded by Principal R. C. Wallace, President of the University of Alberta from 1928 to 1936.

## HISTORY OF THE UNIVERSITY

Dr. Wallace retired in September, 1951, and was succeeded by Principal William A. Mackintosh, the first Queen's graduate to hold the Principalship.

In 1854 the Medical Faculty of Queen's was established. It was reorganized in 1866 as the Royal College of Physicians and Surgeons in affiliation with the University, but in 1891 the original status was resumed. Excellent facilities for clinical work are provided in the Kingston General Hospital, Hotel Dieu, and the Ontario Hospital.

Queen's led the way in co-education. As early as 1870 special classes in English and other subjects were formed for women, but Courses leading to a degree were not opened to them until 1878-79. In 1880 co-education was extended to the medical course, and in 1883 a separate Women's Medical College was opened and affiliated with Queen's. It was closed in 1894, as similar facilities were offered in Toronto and elsewhere. In 1943, for the first time in 49 years, women were again admitted to the Faculty of Medicine.

The School of Mining was founded in 1893 under an Ontario charter and was under the control of a separate Board until 1916 when it was amalgamated with the University, and now constitutes the Faculty of Applied Science. In 1943 the Faculty of Applied Science admitted women to the Course for the first time.

In 1907 the Ontario Government established at Queen's a second Faculty of Education for the purpose of providing professional training for teachers in the secondary schools of the Province. In 1920, however, the work of the Faculty was discontinued because of the decision of the Government to extend the scope of the Normal Schools and to create in Toronto the Ontario College for Teachers.

Queen's University, though founded by a church, was dedicated to the nation. As its constituency expanded, its constitution was gradually broadened, until finally in 1912, as a result of an amicable arrangement between the Presbyterian Church and the Trustees of the University, an act was passed by the Dominion Parliament removing the last vestige of denominational control.

The endowment of the University is at present almost \$5,671,550 and the annual income, derived from all sources, is over \$1,780,000. The registration has grown from 665 in 1900 to over 4,000 in the present session, and Queen's has become nation-wide in its work and influence.

## GOVERNMENT AND ADMINISTRATION

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The administration of the University is vested in the Board of Trustees, the University Council, the Senate, and the Faculty Boards.

### THE BOARD OF TRUSTEES

The Board of Trustees consists of ex-officio and elective members. The former are the Chancellor, the Principal, and the Rector. The latter consist of (1) one representative from each affiliated college, (2) representatives as provided for by the Statutes from (a) the University Council, (b) the Benefactors, (c) the Graduates, and (3) members elected by the Board of Trustees.

The functions of the Board of Trustees are to manage the finances, to possess and care for the property, to procure legislation, to appoint instructors and other officers, and in general attend to such external matters as do not relate directly to instruction.

### THE UNIVERSITY COUNCIL

The University Council consists of the Chancellor, the Trustees, the members of the Senate, and an equal number of members elected by the graduates from their own members.

The annual meeting of the Council is held on the day immediately preceding the spring Convocation.

The functions of the Council are:

(1) To elect the Chancellor, except when two or more candidates are nominated, in which case the election is by registered graduates.

(2) To elect six trustees, two of whom shall retire annually.

(3) To make by-laws governing the elections of (a) the Rector by the registered students, (b) seven trustees by the benefactors, (c) six trustees by the University Council, (d) six trustees by the graduates.

(4) To discuss all questions relating to the University and its welfare.

(5) To make representation of its views to the Senate or the Board of Trustees.

(6) To decide on proposals for affiliation.

(7) To arrange all matters pertaining to (a) its own meetings and business, (b) the meetings and proceedings of Convocation, (c) the installation of the Chancellor, (d) the fees for membership, registration and voting.

## THE SENATE

The Senate consists of:

The Principal.

The Vice-Principal.

The Principal of Queen's Theological College.

The Dean of the Faculty of Arts.

The Dean of the Faculty of Applied Science.

The Dean of the Faculty of Medicine.

Three Professors elected by the Faculty of Arts.

Three Professors elected by the Faculty of Applied Science.

Three Professors elected by the Faculty of Medicine.

One Professor elected by the Faculty of Queen's Theological College.

The functions of the Senate are:

(1) To determine all matters of an academic character which concern the University as a whole.

(2) To consider and determine all courses of study leading to a degree, including conditions of Matriculation on recommendation of the respective Faculty Boards; but the Senate shall not embody any changes without having previously presented them to the Faculty.

(3) To recommend to the Board of Trustees the establishment of any additional faculty, department, chair, or course of instruction in the University.

(4) To be the medium of communication between the Alma Mater Society and the Governing Boards.

(5) To determine all regulations regarding the social functions of the students within the University, and regarding the University Library and University Reading Rooms.

(6) To publish the University Calendars.

(7) To conduct Examinations.

(8) To grant Degrees.

(9) To award University Scholarships, Medals, and Prizes.

(10) To enforce the Statutes, Rules and Ordinances of the University.

(11) And generally to make such recommendations to the Governing Boards as may be deemed expedient for promoting the interests of the University.



## THE FACULTY BOARDS

The Faculty Boards are constituted as follows:

In the Faculty of Arts and in the Faculty of Applied Science, the Dean, Professors, Associate Professors, Assistant Professors, and Lecturers of each Faculty (in Arts, after one year's experience) have power to meet as separate boards, and to administer the affairs of each Faculty under such regulations as the Board of Trustees may prescribe.

In the Faculty of Medicine, the Dean, Professors, Associate Professors, and Assistant Professors have power to meet as a separate board, and to administer the affairs of the Faculty under such regulations as the Board of Trustees may prescribe.

The Principal and Vice-Principal are *ex-officio* members of each of the Faculty Boards.

The functions of the Faculty Boards are:

(1) To recommend to the Senate courses of study leading to a degree, and the conditions of admission.

(2) To decide upon applications for admission or for change of course, subject to the regulations of the Senate.

(3) To submit to the Senate names for both ordinary and honorary degrees.

(4) To arrange the time-table for classes and to edit the Faculty Calendar, subject to the approval of the Senate.

(5) To control registration, and determine the amount of fees and manner of payment, subject to the regulations of the Senate and the approval of the Board of Trustees.

(6) To deal with class failures.

(7) To exercise academic supervision over students.

(8) To make such recommendations to the Senate as may be deemed expedient for promoting the efficiency of the University.

(9) To award Faculty Scholarships, Medals, and Prizes.

(10) To appoint within the limits of the funds made available by the Trustees such sessional assistants, fellows, tutors, and demonstrators as shall be needed to give instruction in the subjects taught by the Faculty.

(11) To pass such regulations and by-laws as may be necessary for the exercise of the functions of the Faculty.

# OFFICERS OF ADMINISTRATION

## THE UNIVERSITY

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VICE-PRINCIPAL EMERITUS—W. E. McNeill, M.A., Ph.D., D.C.L., LL.D.,  
F.R.S.C.

VICE-PRINCIPAL—J. A. Corry, LL.B., B.C.L., LL.D., F.R.S.C.

REGISTRAR—Jean I. Royce, B.A.

TREASURER—M. C. Tillotson, M.B.E., B.Com., M.B.A.

DEAN OF WOMEN—A. Vibert Douglas, M.B.E., M.Sc., Ph.D., F.R.A.S.

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WARDEN, STUDENTS' MEMORIAL UNION—J. E. Wright, M.B.E.

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DIRECTOR OF THE SUMMER SCHOOL—H. L. Tracy, B.A., Ph.D.

DIRECTOR, SCHOOL OF NURSING—Jenny M. Weir, B.Sc., M.A., Reg.N.

DIRECTOR, SCHOOL OF PHYSICAL AND HEALTH EDUCATION—F. L. Bartlett,  
B.A.

ASSISTANT REGISTRAR—K. Jean Richardson, B.A.

ASSISTANT TREASURER—J. W. Bannister, B.Com.

ASSISTANT DIRECTOR OF UNIVERSITY EXTENSION—Kathleen L. Healey.

MEDICAL OFFICER—W. A. Young, B.A., M.D., C.M., F.R.C.P.(C)

UNIVERSITY CHAPLAIN AND ADVISER TO VETERANS—Rev. A. M. Laverty,  
B.A., B.D.

CHIEF PROCTOR—H. S. Pollock, M.Sc.

SECRETARY OF THE GENERAL ALUMNI ASSOCIATION AND MANAGER OF  
THE EMPLOYMENT BUREAU—H. J. Hamilton, B.A.

DIRECTOR OF PUBLICITY—D. G. Dewar, B.A., B.S.W.

ENDOWMENT OFFICER—J. G. Chance, B.A.

SECRETARY-TREASURER OF THE ATHLETIC BOARD OF CONTROL—J. C. Hicks.

MAINTENANCE ENGINEER AND SUPERINTENDENT OF BUILDINGS—R. Hinton.

ASSISTANT TO THE SUPERINTENDENT OF BUILDINGS—F. R. Leadlay, B.Sc.

THE FACULTY OF ARTS  
(Founded 1841)

DEAN—R. O. Earl, E.D., B.A., S.M., Ph.D.

SECRETARY—Jean I. Royce, B.A.

THE FACULTY OF MEDICINE  
(Founded 1854)

DEAN—G. H. Ettinger, M.B.E., B.A., M.D., C.M., F.R.S.C.

SECRETARY—H. D. McEwen, M.A., Ph.D.

THE FACULTY OF APPLIED SCIENCE  
(Founded 1893)

DEAN—D. S. Ellis, D.S.O., V.D., B.Sc., M.A., M.C.E.

SECRETARY—A. Jackson, B.Sc.

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ASSISTANT SECRETARY—J. W. Bannister, B.Com.

EX-OFFICIO MEMBERS

The Chancellor

The Principal

The Rector

ELECTIVE MEMBERS

*Retire 1953*

J. O. Baker, E.D., M.D., C.M. <sup>3</sup>	Edmonton, Alta.
Rev. G. A. Brown, M.A., B.D., D.D. <sup>5</sup>	Kingston, Ont.
Mrs. H. B. Campbell, B.A. <sup>3</sup>	Montreal, Que.
D. A. Gillies, B.A. <sup>7</sup>	Arnprior, Ont.
Donald Gordon, C.M.G., LL.D. <sup>6</sup>	Montreal, Que.
J. E. McAskill, M.D., C.M. <sup>1</sup>	Watertown, N.Y.
T. A. McGinnis, B.Sc. <sup>2</sup>	Kingston, Ont.
A. G. MacLachlan, B.Sc. <sup>1</sup>	Kingston, Ont.
D. I. McLeod, B.A. <sup>6</sup>	Toronto, Ont.
W. A. Newman, C.B.E., B.Sc. <sup>4</sup>	Montreal, Que.

*Retire 1954*

H. G. Bertram, B.Sc., LL.D. <sup>1</sup>	Dundas, Ont.
R. O. Campney, Q.C., B.A., M.P. <sup>1</sup>	Vancouver, B.C.
J. M. Farrell, Q.C., B.A., LL.D. <sup>6</sup>	Kingston, Ont.
R. D. Harkness, D.S.O., M.C., B.Sc. <sup>7</sup>	Montreal, Que.
M. N. Hay, B.Sc. <sup>4</sup>	Kingston, Ont.
J. M. Macdonnell, M.C., Q.C., M.A., M.P. <sup>2</sup>	Toronto, Ont.
W. E. McNeill, M.A., Ph.D., D.C.L., LL.D., F.R.S.C. <sup>6</sup>	Kingston, Ont.
Mrs. James Richardson, LL.D. <sup>6</sup>	Winnipeg, Man.
B. M. Stewart, M.A., Ph.D. <sup>3</sup>	Hartsdale, N.Y.

*Retire 1955*

The Honourable Mr. Justice C. A. Cameron, B.A. <sup>1</sup>	Ottawa, Ont.
W. C. Clark, C.M.G., M.A., LL.D. <sup>3</sup>	Ottawa, Ont.
Elmer Davis, Esq. <sup>6</sup>	Kingston, Ont.
Miss Florence S. Dunlop, M.A., Ph.D. <sup>6</sup>	Ottawa, Ont.
D. D. Findlay, B.Sc. <sup>3</sup>	Carleton Place, Ont.
E. C. Gill, B.A. <sup>6</sup>	Toronto, Ont.
J. C. Macfarlane, Q.C., M.A., D.C.L. <sup>1</sup>	Toronto, Ont.
A. E. MacRae, B.Sc. <sup>7</sup>	Ottawa, Ont.
D. K. MacTavish, Q.C., B.A. <sup>2</sup>	Ottawa, Ont.
J. B. Stirling, B.A., B.Sc., LL.D. <sup>4</sup>	Montreal, Que.

*Retire 1956*

Mrs. D. W. Boucher, B.A., M.Sc. <sup>2</sup>	Kingston, Ont.
Senator A. C. Hardy, Q.C., P.C., B.A., LL.D. <sup>6</sup>	Brockville, Ont.
H. G. Hilton, B.Sc. <sup>6</sup>	Hamilton, Ont.
Dennis Jordan, B.A., M.D., C.M. <sup>6</sup>	Toronto, Ont.

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<sup>1</sup> Elected by the University Council for three years.

<sup>2</sup> Elected by the Benefactors for four years.

<sup>3</sup> Elected by the Graduates for three years.

<sup>4</sup> Elected by the Board of Trustees to represent the Faculty of Applied Science for three years.

<sup>5</sup> Appointed by the Governing Board of Queen's Theological College for one year.

<sup>6</sup> Elected by the Board of Trustees for four years.

<sup>7</sup> Elected by Benefactors to represent the Faculty of Applied Science for three years.



## THE UNIVERSITY COUNCIL

SECRETARY—Ian MacLachlan, B.A., B.Sc.

## EX-OFFICIO MEMBERS

The Chancellor

The Principal

The Members of the Board of Trustees

The Members of the Senate

## ELECTIVE MEMBERS

*Retire 1953*

O. E. Ault, B.A., B.Paed., Ph.D. ....	Ottawa, Ont.
M. J. Aykroyd, B.Sc. ....	Toronto, Ont.
A. F. G. Cadenhead, B.A., D.Sc. ....	Montreal, Que.
Mrs. R. B. Crummy, B.A. ....	Vancouver, B.C.
J. F. Houston, M.D., C.M. ....	Hamilton, Ont.
J. R. Leng, M.C., B.A., B.D. ....	Toronto, Ont.
G. C. Monture, O.B.E., B.Sc., D.Sc. ....	Ottawa, Ont.
*A. G. MacLachlan, B.Sc. ....	Kingston, Ont.
Wallace Troup, M.D., C.M. ....	Ottawa, Ont.

*Retire 1954*

C. H. Bland, C.M.G., B.A. ....	Ottawa, Ont.
*The Honourable Mr. Justice C. A. Cameron, B.A. ....	Ottawa, Ont.
Mrs. D. M. Chown, B.A. ....	Kingston, Ont.
J. M. Courtright, B.A., B.Sc. ....	Toronto, Ont.
D. G. Geiger, B.Sc. ....	Toronto, Ont.
H. J. Hamilton, B.A. ....	Kingston, Ont.
R. H. Hay, M.Sc., Ph.D. ....	Kingston, Ont.
J. E. Plunkett, Phm.B., M.D., C.M., F.R.C.P.(C), F.A.C.P. ....	Ottawa, Ont.
G. J. Smith, B.A., B.Sc. ....	Kingston, Ont.

*Retire 1955*

L. H. Appleby, M.D., C.M., F.R.C.S., F.A.C.S. ....	Vancouver, B.C.
W. N. Ball, M.A. ....	Walkerville, Ont.
G. C. Bateman, C.M.G., O.B.E., B.Sc., LL.D. ....	Montreal, Que.
J. A. Bell, B.Sc. ....	Toronto, Ont.
N. L. Bowen, M.A., B.Sc., Ph.D., LL.D. ....	Chevy Chase, Md.
J. L. Murray, B.A., B.Paed. ....	Kingston, Ont.
Miss Mary K. Rowland, B.A., B.Com. ....	Ottawa, Ont.
N. F. Tisdale, B.Sc. ....	Pittsburgh, Penn.
Miss Mary E. White, M.A. ....	Toronto, Ont.

*Retire 1956*

*R. O. Campney, Q.C., B.A., M.P. ....	Vancouver, B.C.
J. E. Hammett, M.D.,C.M. ....	New York, N.Y.
H. A. Hosking, B.Sc., M.P. ....	Guelph, Ont.
H. I. Marshall, M.Sc. ....	Ottawa, Ont.
S. H. McCuaig, Q.C., B.A., LL.D. ....	Edmonton, Alta.
*J. C. Macfarlane, Q.C., M.A., D.C.L. ....	Toronto, Ont.
B. R. MacKay, B.Sc., Ph.D. ....	Ottawa, Ont.
Ian MacLachlan, B.A., B.Sc. ....	Kingston, Ont.
B. T. Yates, B.Sc., M.E.I.C. ....	Cornwall, Ont.

*Retire 1957*

Mrs. Humphrey Carver, M.A. ....	Ottawa, Ont.
J. A. Hannah, B.A., M.D.,C.M. ....	Toronto, Ont.
Judge Walter Little, B.A. ....	North Bay, Ont.
J. R. Matheson, B.A. ....	Brockville, Ont.
*J. E. McAskill, M.D.,C.M., F.A.C.S. ....	Watertown, N.Y.
Miss Mary McCallum, M.A. ....	Smiths Falls, Ont.
E. M. Patton, B.Com. ....	Montreal, Que.
J. A. Richardson, B.A. ....	Winnipeg, Man.
C. D. Wight, B.Sc. ....	Ottawa, Ont.

*Retire 1958*

H. G. Bertram, B.Sc., LL.D. ....	Dundas, Ont.
C. R. Booth, B.Sc. ....	Ottawa, Ont.
H. T. Ewart, B.A., M.D.,C.M. ....	Hamilton, Ont.
E. L. Longmore, B.Sc. ....	Timmins, Ont.
Miss Helen R. McGregor, B.A. ....	Peterborough, Ont.
L. A. Pierce, M.A., LL.D., Th.D., Litt.D. ....	Toronto, Ont.
H. E. Searle, B.Sc. ....	South Orange, N.J.
D. W. Stewart, B.Sc. ....	Renfrew, Ont.
R. M. Winter, M.B.E., M.A. ....	Ottawa, Ont.

## THE SENATE

## EX-OFFICIO MEMBERS

The Principal  
 The Vice-Principal  
 The Dean of the Faculty of Arts  
 The Dean of the Faculty of Applied Science  
 The Dean of the Faculty of Medicine  
 The Principal of Queen's Theological College

\* Representative of the Council on the Board of Trustees.

## ELECTIVE MEMBERS

*The Faculty of Arts*

G. Krotkov, B.S.A., M.A., Ph.D., F.R.S.C. ....	Retires 1953
A. R. C. Duncan, M.A. ....	Retires 1954
W. E. C. Harrison, O.B.E., M.A. ....	Retires 1955

*The Faculty of Medicine*

J. H. Orr, M.D.,C.M., F.R.C.P.(C) ....	Retires 1953
E. M. Boyd, M.A., M.D.,C.M. ....	Retires 1954
G. M. Brown, M.D.,C.M., D.Phil., M.R.C.P., F.R.C.P.(C), F.A.C.P. ....	Retires 1955

*The Faculty of Applied Science*

T. V. Lord, B.Sc. ....	Retires 1953
H. S. Pollock, M.Sc. ....	Retires 1954
L. A. Munro, M.A., Ph.D., F.R.S.C., F.C.I.C. ....	Retires 1955

*Queen's Theological College*

Rev. W. E. L. Smith, M.C., M.A., Ph.D. ....	Retires 1953
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## CURATORS OF THE LIBRARY

The Principal, the Vice-Principal, the Principal of Queen's Theological College, The Dean of the Faculty of Arts, the Dean of the Faculty of Applied Science, the Dean of the Faculty of Medicine, Jean I. Royce, Professors Hilda Laird, J. W. Brooks, G. M. Brown, and M. M. Ross.

## OFFICERS OF INSTRUCTION

---

### I — EMERITUS PROFESSORS

- M. B. Baker, B.A., B.Sc., LL.D. (Queen's), F.G.S.A., F.R.S.C.  
*Emeritus Professor of Geology and Curator of the Geological  
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Kingston, Ont.
- J. H. Brovedani, D. ès L. (Rennes)  
*Emeritus Professor of Spanish and Italian Languages and  
Literature*  
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- T. Callander, M.A. (Aberdeen, Oxon.)  
*Emeritus Professor of Greek Language and Literature*  
London, England
- P. G. C. Campbell, M.A. (Oxon.), Docteur de l'Université de Paris,  
LL.D. (Queen's)  
*Emeritus Professor of French Language and Literature*  
Kingston, Ont.
- A. L. Clark, B.Sc. (W.P.I.), Ph.D. (Clark), LL.D. (Queen's), F.R.S.C.  
*Emeritus Professor of Physics*  
Kingston, Ont.
- G. H. Clarke, M.A., D.Litt. (McMaster), LL.D. (Queen's),  
D.C.L. (Bishop's), F.R.S.C., F.R.S.L.  
*Emeritus Professor of English Language and Literature*  
Kingston, Ont.
- J. K. Robertson, M.A. (Toronto), LL.D. (Queen's), F.R.S.C., M.R.I.  
*Emeritus Professor of Physics*  
London, Eng.

### II — INSTRUCTORS IN THE FACULTY OF ARTS

(arranged alphabetically)

- H. Alexander, M.A. (Liverpool), F.R.S.C.  
*Professor of English Language and Head of the Department of  
English Language and Literature*

82 Queen's Crescent

- J. W. Ambrose, A.B. (Stanford), Ph.D. (Yale), F.R.S.C., F.G.S.A.  
*Professor of Geological Sciences and Chairman of Undergraduate Geological Studies*  
 42 Napier Street
- William Angus, A.M., Ph.D. (Cornell)  
*Associate Professor and Director of Drama*  
 20 Beverley Street
- F. L. Bartlett, B.A. (Toronto)  
*Professor of Physical and Health Education and Director of the School of Physical and Health Education*  
 10 Maitland Street
- L. G. Berry, M.A., Ph.D. (Toronto), F.G.S.A., F.M.S.A., F.R.S.C.  
*Associate Professor of Mineralogy*  
 Collins Bay P.O.
- J. M. R. Beveridge, B.Sc. (Acadia), Ph.D. (Toronto), M.D. (University of Western Ontario)  
*The Craine Professor of Biochemistry and Head of the Department*  
 58 Centre Street
- André Biéler  
*Professor of Fine Art*  
 33 Hill Street
- R. M. Billings, M.D., C.M. (Queen's)  
*Clinical Assistant in Psychiatry*  
 106 Clergy Street
- J. M. Blackburn, B.Sc. (London School of Economics), Ph.D. (Cantab.)  
*Professor of Psychology and Head of the Department*  
 292 Johnson Street
- J. C. Cameron, M.Com. (Queen's)  
*Professor of Industrial Relations and Head of the Department of Industrial Relations*  
 74 Kensington Avenue
- H. M. Cave, M.A. (Queen's), Ph.D. (Cantab.)  
*Professor of Physics*  
 133 King Street East
- D. W. Cole, M.A. (British Columbia)  
*Instructor in English*  
 265 University Avenue



- J. A. Corry, LL.B. (Sask.), B.C.L. (Oxon.), LL.D. (Sask.), F.R.S.C.  
*Vice-Principal and Hardy Professor of Political Science*  
 44 Kensington Avenue
- K. G. Crawford, M.A. (University of Western Ontario)  
*Associate Professor and Head of the Institute of Local Government*  
 135 Centre Street
- H. W. Curran, B.S. (Hobart College), M.A., Ph.D. (Michigan)  
*Associate Professor of Biology and Director of University Extension*  
 90 Bagot Street
- C. A. Curtis, B.A. (Toronto), Ph.D. (Chicago), F.R.S.C.  
*The Sir John A. Macdonald Professor of Political and Economic Science*  
 307 King Street West
- C. H. Curtis, M.A. (Queen's)  
*Associate Professor of Industrial Relations*  
 5 Napier Street
- R. L. Dorrance, M.A. (Toronto)  
*Associate Professor of Chemistry*  
 148 Lower Albert Street
- A. Vibert Douglas, M.B.E., M.Sc., Ph.D. (McGill), F.R.A.S.  
*Dean of Women and Acting Professor of Astronomy*  
 Ban Righ Hall
- A. R. C. Duncan, M.A. (Edinburgh)  
*The John and Ella G. Charlton Professor of Philosophy and Head of the Department*  
 239 Albert Street
- R. O. Earl, E.D., B.A. (Queen's), S.M., Ph.D. (Chicago)  
*Dean of the Faculty of Arts, The John Roberts Allan Professor of Biology and Head of the Department of Biology*  
 313 King Street West
- G. L. Edgett, M.A. (Mt. Allison), Ph.D. (Ill.)  
*Associate Professor of Mathematics*  
 41 Traymoor Avenue
- A. Edinborough, M.C., M.A. (Cantab.) (on leave of absence, 1952-53)  
*Assistant Professor of English*  
 132 Earl Street

- J. F. Edwards, B.A. (Queen's), M.A. (P.E.) (Michigan)  
*Associate Professor of Physical and Health Education*  
 72 Collingwood Street
- Hans Eichner, B.A., Ph.D. (London) (on leave of absence, 1952-53)  
*Assistant Professor of German*  
 260 King Street East
- H. W. Ellis, M.Sc. (Acadia), M.A., Ph.D. (Toronto)  
*Assistant Professor of Mathematics*  
 Grenville Park, R.R. #7
- H. M. Estall, M.A. (McGill), Ph.D. (Cornell)  
*Associate Professor of Philosophy*  
 Grenville Park, R.R. #7
- W. H. Evans, B.A., Docteur de l'Université de Paris  
*Professor of French Language and Literature and Head of the Department*  
 99 Lower Albert Street
- R. L. Fauconnier, L-ès-L., Agrégé de l'Université  
*Associate Professor of French*  
 115 King Street West
- M. M. Fitzpatrick, M.A. (Toronto)  
*Lecturer in Geological Sciences*  
 Queen's University
- A. M. Fox, M.A. (Toronto)  
*Assistant Professor of Spanish*  
 77 Helen Street
- G. B. Frost, B.A. (Toronto), Ph.D. (Calif.)  
*Professor of Chemistry*  
 Annandale Apartments
- Graham George, Mus. Doc. (Toronto) (on leave of absence, 1952-53)  
*Associate Professor of Music*  
 164 College Street
- F. W. Gibson, M.A. (Queen's),  
*Associate Professor of History, after September 1, 1952*  
 151 Union Street West
- S. M. Gilmour, B.A. (Manitoba), B.D. (Union), Ph.D. (Chicago),  
 D.D. (Montreal)  
*Acting Professor of Hebrew and Religion*  
 Queen's University Grounds

- H. M. Good, B.A., Ph.D. (Toronto)  
*Assistant Professor of Biology*  
 Grenville Park, R. R. #7
- J. A. Gray, O.B.E., D.Sc. (Manchester), F.R.S., F.R.S.C.  
*The Chown Science Research Professor of Physics (until September 1, 1952)*  
 26 Wellington Street
- H. E. Gruber, B.A. (Brooklyn College), Ph.D. (Cornell)  
*Assistant Professor of Psychology*  
 260 King Street East
- Israel Halperin, M.A. (Toronto), Ph.D. (Princeton)  
*Associate Professor of Mathematics*  
 Grenville Park, R.R. #7
- R. J. Hand, B.Com. (Manitoba), M.B.A. (Chicago)  
*Assistant Professor of Marketing*  
 587 Johnson Street
- H. W. Harkness, B.Sc., B.A. (Queen's), M.Sc., Ph.D. (McGill)  
*Professor of Physics*  
 181 University Avenue
- W. E. C. Harrison, O.B.E., M.A. (London)  
*Professor of History and Head of the Department*  
 16a Maitland Street
- J. E. Hawley, M.A. (Queen's), Ph.D. (Wis.), F.R.S.C., F.G.S.A.,  
 F.M.S.A.  
*Miller Memorial Research Professor and Chairman of Graduate work in the Geological Sciences*  
 123 Queen's Crescent
- H. W. Hilborn, M.A., Ph.D. (Toronto)  
*Professor of Spanish and Italian Languages and Literature and Head of the Department*  
 244 Frontenac Street
- J. E. Hodgetts, M.A. (Toronto), Ph.D. (Chicago)  
*Associate Professor of Political Science*  
 129 Lower William Street
- R. O. Hurst, B.A., Ph.D. (Toronto)  
*Assistant Professor of Biochemistry*  
 Queen's University
- R. L. Jeffery, B.A. (Acadia), M.A., Ph.D. (Cornell), D.Sc. (Acadia),  
 F.R.S.C.  
*The N. F. Dupuis Professor of Mathematics and Head of the Department*  
 126 University Avenue



- A. W. Jolliffe, M.A. (Queen's), Ph.D. (Princeton), F.R.S.C., F.G.S.A.  
*Professor of Geological Sciences*  
68 Collingwood Street
- H. A. Kent, E.D., M.A. (Dal.), D.D. (Montreal), LL.D. (Mt. Allison),  
F.R.S.A., F.A.G.S.  
*Sessional Lecturer in Hebrew and Religion*  
80 Traymoor Avenue
- F. A. Knox, B.A. (Queen's), F.R.S.C.  
*Professor of Economics and Head of the Department of Political  
and Economic Science*  
140 Churchill Crescent
- Gleb Krotkov, B.S.A. (Prague), M.A., Ph.D. (Toronto), F.R.S.C.  
*Professor of Biology*  
112 College Street
- Valentina N. Krotkov, B.A. (Moscow), M.A. (Toronto)  
*Instructor in Russian*  
112 College Street
- Hilda C. Laird, B.A. (Queen's), B.L.S. (Pratt), Ph.D. (Cornell)  
*Professor of German and Head of the Department of German  
Language and Literature*  
502 Annandale Apartments
- Isabel M. Laird, M.A., B.Ed. (Edinburgh)  
*Assistant Professor of Psychology*  
31 King Street East
- Dorothy Leggett, B.S. (McGill), M.Sc. (Wisconsin)  
*Instructor in Physical and Health Education*  
30 Edgehill Street
- A. L. Lenard, B.A., B.P.H.E. (Queen's)  
*Lecturer in Physical and Health Education*  
49 Beverley Street
- W. G. Leonard, F.C.A.  
*Director of Professional Courses in Commerce*  
257 Willingdon Avenue
- H. M. Love, B.Sc., Ph.D. (Queen's, Belfast)  
*Assistant Professor of Physics*  
Queen's University
- A. R. M. Lower, M.A. (Toronto), Ph.D. (Harvard), F.R.S.C.  
*The James Douglas Professor of Canadian and Colonial History*  
Collins Bay

- W. M. Martin, B.Sc. (Queen's), Ph.D. (McGill)  
*Assistant Professor of Physics*  
 172 Carruthers Street
- John Meisel, M.A. (Toronto)  
*Lecturer in Political Science*  
 207 Lower William Street
- Norman Miller, M.A. (Queen's), Ph.D. (Harvard)  
*Professor of Mathematics and Chairman of Extramural and  
 Tutorial Work in Mathematics*  
 28 Kensington Avenue
- R. Y. Moir, M.A. (Queen's), Ph.D. (McGill)  
*Assistant Professor of Chemistry*  
 178 Johnson Street
- L. A. Munro, M.A. (Dal.), Ph.D. (McGill), F.R.S.C., F.C.I.C.  
*Professor of Chemistry*  
 93 Beverley Street
- Jeanne M. McConnell, B.S., C.A.P.  
*Instructor in French*  
 31 Ellerbeck Street
- C. H. McCuaig, M.D., C.M. (Queen's)  
*Professor of Psychiatry and Head of the Department*  
 R.R. #2, Mount Chesney
- J. K. McDonald, B.A. (British Columbia), M.A. (Oregon)  
*Lecturer in Spanish*  
 65 West Street
- Mary L. Macdonnell, M.A. (Queen's)  
*Assistant Professor of Classics*  
 104 Queen's Crescent
- J. L. McDougall, M.A. (Toronto)  
*Professor of Commerce*  
 253 Albert Street
- J. Lansing McDowell, B.A. (Toronto)  
*Sessional Lecturer in Music, 1952-53*  
 Queen's University
- L. G. Macpherson, B.A. (Brandon), C.A.  
*Associate Professor of Commerce*  
 82 Beverley Street

- J. A. McRae, M.A. (Queen's), Ph.D. (Manchester), F.R.I.C., F.R.S.C.  
*Professor of Chemistry and Head of the Department*  
 226 Frontenac Street
- Jean Ogier, L.-ès-L. (Université de Poitiers)  
*Lecturer in French*  
 350 Johnson Street
- J. H. Orr, M.D., C.M. (Queen's), F.R.C.P.(C)  
*Professor of Bacteriology*  
 529 Johnson Street
- G. B. Reed, O.B.E., B.Sc., M.A., Ph.D. (Harvard), F.R.S.C.  
*Professor of Bacteriology and Head of the Department*  
 218 Albert Street
- D. T. Roberts, B.Sc. (Bristol), Ph.D. (Birmingham)  
*Assistant Professor of Physics*  
 462 Brock Street
- B. Rose, B.Sc. (Queen's), Ph.D. (Yale), F.R.S.C., F.G.S.A.  
*Professor of Geology*  
 208 Albert Street
- M. M. Ross, B.A. (New Brunswick), M.A. (Toronto), Ph.D. (Cornell)  
*Professor of English*  
 755 Brock Street
- Marion Ross, B.A. (Queen's), M.A. (Columbia)  
*Assistant Professor of Physical and Health Education*  
 123 Union Street West
- B. W. Sargent, M.B.E., M.A. (Queen's), Ph.D. (Cantab.), F.R.S.C.  
*Professor of Physics and Head of the Department*  
 751 Johnson Street
- Margaret E. M. Sawyer, M.A., Ph.D. (McGill)  
*Assistant Professor of Physiology*  
 Royal Military College Grounds
- Glen Shortliffe, M.A. (Alberta), Ph.D. (Cornell)  
*Associate Professor of French*  
 Cartwright's Point
- D. W. Slater, B.Com. (Manitoba), B.A. (Queen's)  
*Assistant Professor of Economics*  
 Queen's University

- R. G. H. Smails, B.Sc. (Econ.) (London), A.C.A. (Eng.), F.C.A. (Ont.)  
*Director of the School of Commerce and Administration and  
 Professor of Commerce*  
 52 Kensington Avenue
- S. E. Smethurst, M.A. (Cantab.)  
*Professor of Classics*  
 Bath Road Post Office
- A. H. Smith, M.A. (Queen's), Ph.D. (Toronto)  
*Associate Professor of Psychology*  
 Queen's University
- W. E. L. Smith, M.C., M.A. (Toronto), Ph.D. (Edinburgh)  
*Associate Professor of History*  
 R.R. #2, Kingston
- W. M. Smith, B.Sc. (New Brunswick), Ph.D. (McGill), Ph.D. (Cantab.)  
*Associate Professor of Chemistry*  
 40 Napier Street
- J. E. Smyth, M.Com. (Toronto), C.A.  
*Associate Professor of Commerce*  
 61 Hill Street
- F. Tindall, A.B. (Syracuse)  
*Assistant Professor of Physical and Health Education*  
 45 West Street
- H. L. Tracy, B.A. (Toronto), Ph.D. (Chicago)  
*Professor of Classics, Head of the Department of Classics and  
 Director of the Summer School*  
 260 Johnson Street
- L. E. H. Trainor, M.A. (Saskatchewan), Ph.D. (Minnesota)  
*Assistant Professor of Physics*  
 Queen's University
- M. C. Urquhart, B.A. (Alberta)  
*Associate Professor of Economics*  
 134 King Street East
- J. L. Usher, B.A. (Sask.), M.Sc., Ph.D. (McGill)  
*Assistant Professor of Geology*  
 130 Carruthers Street
- J. R. W. Vallentyne, B.A. (Queen's)  
*Lecturer in Biology*  
 Queen's University
- C. J. Vincent, B.A. (University of Western Ontario), A.M., Ph.D.  
 (Harvard)  
*Professor of English*  
 105 Hill Street

- E. A. Walker, M.A. (Cantab.)  
*Associate Professor of English*  
 251 Willingdon Avenue
- E. E. Watson, M.Sc. (McGill), Ph.D. (Cantab.)  
*Professor of Physics and Chairman of Undergraduate Studies  
 in Physics*  
 82 Traymoor Avenue
- Hans H. Weil, M.A. (Cantab.)  
*Lecturer in German*  
 Queen's University
- A. S. West, B.Sc. (Mass. State), Ph.D. (Yale)  
*Professor of Biology*  
 233 Willingdon Avenue
- A. G. C. Whalley, M.A. (Oxon.), M.A. (Bishop's), Ph.D. (London)  
*Assistant Professor of English*  
 87 Pembroke Street
- F. M. Wood, M.A., B.Sc. (Queen's)  
*Professor of Mathematics*  
 79 College Street

### III — PART-TIME INSTRUCTORS, TEACHING FELLOWS,

#### ASSISTANTS

- Margaret Angus, B.A. (Montana)  
*Assistant in Drama*  
 20 Beverley Street
- R. J. Arms, B.A. (Saskatchewan)  
*Teaching Fellow in Mathematics*  
 Queen's University
- Elspeth H. Baugh, B.A. (Queen's), A.M. (Michigan)  
*Instructor in Psychology*  
 118 Gore Street
- D. B. Beavis, B.A. (Queen's)  
*Instructor in English (Session 1951-52)*  
 510 Brock Street



- Helen L. Brown, M.A. (Toronto)  
*Research Assistant in Psychology*  
 31 King Street East
- B. W. Henheffer, B.A. (Queen's)  
*Instructor in Psychology*  
 Queen's University
- Constance Ross, B.A. (Toronto), M.A. (Minnesota)  
*Instructor in Psychology*  
 Sunnyside Children's Centre, Union Street
- H. A. Still, B.A. (Manitoba)  
*Teaching Fellow in Mathematics*  
 Queen's University
- H. F. Trotter, B.A. (Queen's)  
*Assistant in Mathematics*  
 320 King Street West
- Doris C. Warner, M.A.  
*Research Assistant in Psychology*  
 59 West Street

#### IV — TUTORS FOR SESSION 1951 - 52

- BACTERIOLOGY: E. W. Campsall, B.A. (Queen's), M.D. (McGill)
- BIOCHEMISTRY: Jean A. Clark, B.Sc. (McGill), J. R. McLean, B.Sc. (Queen's)
- BIOLOGY: S. R. Brown, B.A. (Queen's), W. E. Cawthray, B.Sc. (New Brunswick), W. V. Delaney, Mary S. Krotkov, J. Myers, A. B. McBurney, Sheila M. Omond, C. L. Thacker, J. F. Weir.
- CHEMISTRY: R. N. Clayton, B.Sc. (Queen's), A. J. Di Francesco, B.A. (Queen's), R. P. Heldt, Robin K. Howland, S. B. Karis, B.Sc. (Queen's), D. L. Podell, A.B. (Hamilton College), A. D. Robson, F. H. Sexsmith, B.A. (Queen's), R. B. Smyth, B.Sc. (Queen's), L. C. Stephenson, J. A. Stewart, B.A. (Queen's), W. J. Thompson, J. E. Tibbett, B.Sc. (Queen's), J. J. Urprung, B.A. (Queen's).
- COMMERCE: L. M. Pollock, B.Com. (Queen's).
- ENGLISH: C. E. Kelso, J. B. J. Prior, F. J. Wilson, M.A. (Queen's).
- FINE ART: Mrs. Murie Meisel, B.A.
- FRENCH: Mrs. A. R. C. Duncan, Mrs. R. L. Fauconnier, L.-ès.L.



GEOLOGICAL SCIENCES: W. R. A. Baragar, B.A.Sc. (British Columbia), H. D. Carlson, B.Sc. (Queen's), M.Sc. (Toronto), L. C. Coleman, B.A. (Queen's), A. D. Graham, B.A. (Queen's), W. E. Hale, M.Sc. (New Brunswick), G. M. Hogg, B.Sc. (Queen's), C. L. Lewis, M.Sc. (Queen's), W. O. J. G. Meijer, Dipl.Ing. (Swiss Federal Institute of Technology, Zürich), D. H. Richter, B.Sc. (New Mexico School of Mines), W. R. Sproule, B.Sc. (Saskatchewan), W. G. Wegenast, B.Sc. (Queen's).

GERMAN: Irmgard Cremer, Margaret Hildebrande.

GREEK: K. R. Thompson.

HISTORY: Mrs. H. A. Elliott, M.A. (Bristol), G. K. Stewart, B.A. (McGill), F. J. Wilson, M.A. (Queen's).

ITALIAN: Grace P. Abrams, K. R. Thompson.

MATHEMATICS: H. E. Clarke, W. G. Forsythe, Alice M. Metzger, B.A. (University of Western Ontario), R. S. McKeown, Shirley M. O'Brien, Gertrude Robertson, R. E. Thomas.

PHILOSOPHY: E. J. Bond, R. L. Jones, J. F. Malcolm, D. C. McNiven, Mrs. P. N. S. Trotman, M.A. (Oxon).

PHYSICAL EDUCATION: R. A. Gow, Pamela B. Macdonald.

PHYSICS: R. J. Berry, B.Sc. (Queen's), C. B. Bigham, B. Sc. (Queen's), W. K. Dawson, B. Sc.A. (Laval), A. J. Goodjohn, M.Sc. (Alberta), E. L. Harris, J. V. Hughes, A.R.C.S., B.Sc., Ph.D. (London), D.I.C., F. Inst.P., R. V. Krotkov, B.A. (Queen's), I. B. McDiarmid, M.A. (Queen's), T. J. Rock, R. S. Storey.

POLITICAL AND ECONOMIC SCIENCE: R. M. Adams, B.A. (University of Western Ontario), G. W. Ainslie, W. G. R. Cameron, B.A. (Queen's), G. A. R. Cluett, B.A. (Queen's), J. C. Crosbie, J. E. Kersell, Myrtle M. Morrison, C. F. McInnis, Elspeth M. Taylor, H. W. Walker, B.A. (Queen's), F. J. Wilson, M.A. (Queen's), F. J. L. Young, M.A. (St. Andrews).

PSYCHOLOGY: W. Baker, W. C. Clark, P. E. Coster, Gene A. Lewis, A. R. MacKinnon, Lorraine F. Purvis, R. C. Whitney.

SPANISH: Mrs. E. Reid, M.A. (Toronto), Mrs. H. S. Sexsmith, B.A. (Queen's), Mrs. J. G. Smith, B.A. (Toronto).

## EQUIPMENT AND SPECIAL FEATURES

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### THE LIBRARY

The Douglas Library, named for Chancellor James Douglas, LL (1837-1918), was opened in 1924. Opposite the main entrance, enshrines the Memorial Cenotaph where a bronze plaque records the names of 178 Queen's students and graduates who sacrificed their lives 1914-1918.

The ground floor houses a well-equipped book-bindery. On the first floor are the Librarian's Office; the Treasure Room, containing Queen's archives, rare books, manuscripts, and incunabula; the Offices; entrance to the Stacks; and the Music Room which contains a record library of about 3,000 discs, a combination radio and record player, a grand piano, well-appointed furnishings, and a music reference library of about 1,100 volumes and 1,200 music scores. On the second floor are the Lorne Pierce Room, housing a collection of Canadiana rich in first editions, rare items, and original manuscripts; the Map Room which contains an extensive collection of historical maps, Canadian and British official war maps of World War II, and the McNicol Collection of works relating to telegraphy, telephony, and radio.

The Main Reading Room with arched ceiling, mullioned windows featuring printers' devices in stained glass, dark oak furnishings, and fluorescent lighting, runs the entire length of the third floor. On open shelves are current numbers of over 800 periodicals and about 5,000 general reference works; three vertical files contain pamphlet material on current topics. The Card Catalogue indexes all library holdings; the system of classification is that of the Library of Congress. The Circulation, Reference, and Reserved Books departments, the Art Room, and the Microfilm Room are all on the third floor.

There are five tiers of stacks at the north and south ends of the Library and two in the central part of the building. The Government Document section contains about 50,000 items, the general collection over 220,000 volumes. Many paintings, etchings, and other works of art belonging to the Queen's Art Collection are housed in the Douglas Library, also the Shortt-Haydon collection of Canadian portraits and historical prints.

Pending construction of an Administration Building, University administrative offices are housed in the Douglas Library.

In addition to the main library there are departmental libraries for Chemistry, Biochemistry, Biology, Civil, Mechanical and Electrical Engineering, Mathematics, Geological Sciences, Mining and Metallurgy, Medicine and Theology.

Library hours: Monday-Friday, 8 a.m. to 10.30 p.m.; Saturday, a.m. to 4 p.m.; Sunday, 2 p.m. to 5 p.m.

### THE MUSEUMS

*The Miller Memorial Museum*, named in memory of the late Willet G. Miller, formerly Provincial Geologist of Ontario, has been erected for the Department of Geological Sciences. The main floor is entirely devoted to museum purposes and contains among other things an excellent collection of economic minerals used in industrial processes; a collection of at least a thousand mounted individual crystals; large collections illustrating the systematic classification of minerals and rocks; another illustrating the ores found particularly in Canadian mines, a stratigraphic assembly of rocks and a paleontological collection illustrating the geologic life record. The museum is now being reorganized by Emeritus Professor M. Baker.

An ethnological collection of weapons, utensils, dresses and ornaments is also housed in the east wing of the museum.

*The Biological Museum*, in the Old Arts Building, has a large botanical collection illustrating the flora of North America, Europe, Asia, South Africa, and Australia; a zoological collection representing the Canadian fauna by a large number of prepared specimens of mammals, birds, reptiles, fishes, insects, and mollusca.

### THE LABORATORIES

*The Biological Laboratories* are in the basement and on the main and the third floor of the Old Arts Building. These consist of laboratories for General Botany, Advanced Botany, Plant Physiology, Invertebrate Zoology and Vertebrate Zoology. For graduate work and research special laboratories are available for investigations in the following fields: plant pathology, cytology, plant physiology, research with radioactive isotopes, paper chromatography, entomology with special emphasis on insect pathology and insects as disease vectors, fresh water biology. A special research greenhouse and a room for photographic work are included in the facilities of the department.

*The Chemical Laboratories* are in Gordon Hall to which a large extension was added in 1949 to provide additional accommodation



for Chemistry and to house the Department of Chemical Engineering. In the older building there are laboratories for Electrochemistry and Medical Organic Chemistry on the fourth floor, three laboratories for General Chemistry on the third floor, three laboratories for Quantitative Analysis and one for Organic Chemistry on the second floor, and three for Qualitative Analysis on the first or basement floor. On the fourth floor of the extension are laboratories for Physical and Colloid Chemistry; the third floor contains several offices, numerous research laboratories and a workshop. The second floor has a large laboratory for Organic Chemistry adjoining the Organic laboratory of the older building. In this portion of the building there are a considerable number of research laboratories as well as professorial offices and private research laboratories. The laboratories contain much special research apparatus.

*The Psychological Laboratory* is situated at 126 Union Street. It contains a room equipped with a one-way screen for observing children being given tests, an extensive library of tests, a library of psychological periodicals, and a small library of psychological films. It has seminar and research rooms. The apparatus available includes standard equipment for research and for demonstrations in psychology. There is a small workshop for the construction of apparatus and a dark room.

*The Geological and Mineralogical Laboratories* which are in Miller Hall are well equipped for both regular class work and research. They include large laboratories for mineral study, blowpipe analysis, general geology, and smaller ones for microscopic study of thin sections of minerals and rocks, and polished sections of ores. Individual collections of minerals, rocks, and ores are readily available. In addition there are a map room, a drafting room, a chemical laboratory, a sedimentation laboratory and dark rooms for optical, goniometric and photographic work. Research laboratories are equipped with modern X-ray spectrometers for crystal study, a two metre grating spectrophotograph, a variable source power unit, and various electric furnaces for high temperature experiments. A technician is available for the preparation of both thin sections and polished sections and a well equipped small machine shop is in his charge.

*The Physics Laboratories*, except for a room used by the School of Navigation, occupy the whole of Ontario Hall. The basement contains a research workshop, a liquid air plant, a large elementary laboratory, rooms for advanced instruction in optics and in heat, and research rooms. A synchrotron manufactured by the General Electric Company and capable of producing electrons and X-rays of energy varying from twenty-five to seventy million electron volts was installed during Session 1949-50. It is the only instrument of its type

operation in Canada. Very little is known about the properties of electrons and X-rays in this range of energies so that there is practically a virgin field for research. As the X-rays are very penetrating, the instrument is in an underground room, with a control desk at ground level. On the main floor there are several laboratories for first and second year classes, a large room for advanced classes in atomic physics, two lecture rooms and a room suitable for lectures and for working problems. The second floor has two large lecture rooms, laboratories for electrical measurements, for mechanics, and for research, and a library. Part of the attic is used by the technician and curator of the department, the remainder contains an excellent workshop for the use of senior students and staff members, a storage battery room, an acid room, a laboratory for standard measurements, and a group of research rooms. Private offices and research laboratories are to be found throughout the building.

#### FACILITIES FOR FIELD WORK

*Geological Sciences.* In the vicinity of Kingston a greater variety of economic minerals and metalliferous ores is mined than in any similar area in Canada. Through the kindness of the managers of the various mines may be visited by the Geology classes, and students may thus obtain valuable information concerning field conditions.

*Botany and Zoology.* Exceptionally good facilities for field study are provided in the vicinity of Kingston by the great diversity of land surfaces and bodies of water. A wide range of plant and animal associations are within easy reach of the University. The University is an experimental station on Lake Opinicon, thirty-two miles from Kingston, for research in land and water biology.

#### FACILITIES FOR ATHLETICS

Queen's University provides ample facilities for athletics. The gymnasium is one of the finest in Canada with a swimming pool of Olympic size. In the University grounds is a large covered skating rink with artificial ice. Adjoining the University is the football field, with the George Richardson Memorial Stadium, given by Dr. James Richardson, formerly Chancellor of the University, in memory of his brother, Captain George Richardson, a graduate of Queen's and a former athlete who was killed in the Great War. There is room and equipment for all students who wish to take part in football, hockey, badminton, basketball, field hockey, tennis, track athletics, archery, swimming, diving, boxing, and wrestling. Exceptionally good facilities for skiing are available at Kingston Mills, about five miles from the University proper.

## THE MUSIC ROOM

The Music Room in the Douglas Library is furnished and equipped for music study and listening. It contains a collection of gramophone records which is based on the original Carnegie gift and now numbers some three thousand records. The collection is representative in both classical and contemporary fields and gives the students an unusual opportunity for musical experience.

The equipment also includes a radio-phonograph of the highest fidelity available and a Steinway grand piano.

The room is open to the general student body every evening during the session, and is also made available for the important operatic and symphonic week-end broadcasts.

## THE UNIVERSITY CONCERT SERIES

The University Concert Series is available to students for \$3 and \$4 for the season.

The programme for session 1951-52 was as follows: Isaac Stern, violinist; Jimmie Shields, tenor; William Kapell, pianist; St. Mary Magdalene Chorus; and the New World Orchestra conducted by Samuel Hersenhoren.

The series for 1952-53 includes Glenn Gould, pianist; Erica Berger, soprano; The Reginald Kell Players (clarinetist, pianist and violinist); and the Boyd Neel Orchestra.



## GENERAL INFORMATION

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### DEGREES

By the Royal Charter granted to Queen's College, it is "willed, ordained and granted, that the said College shall be deemed and taken to be an University, and that the students in the said College shall have liberty and faculty of taking the degree of Bachelor, Master, and Doctor in the several Arts and Faculties".

The degrees at present conferred under the statutes of the University are as follows:

#### I.—HONORARY DEGREES

Doctor of Divinity, D.D.; Doctor of Laws, LL.D.; Doctor of Science, Sc.

#### II.—DEGREES BY EXAMINATION

##### 1.—*In Arts*

Bachelor of Arts, B.A.; Bachelor of Commerce, B.Com.; Master of Arts, M.A.; Master of Commerce, M.Com.; Doctor of Philosophy, Ph.D.

##### 2.—*In Theology*

Bachelor of Divinity, B.D.

##### 3.—*In Medicine*

Doctor of Medicine, M.D.; Master of Surgery, C.M.; Master of Science, M.Sc.(Med.).

##### 4.—*In Applied Science*

Bachelor of Science, B.Sc.; Master of Science, M.Sc.

##### 5.—*In Nursing*

Bachelor of Nursing Science, B.N.Sc.

##### 6.—*In Physical and Health Education*

Bachelor of Arts, B.A.; Bachelor of Physical and Health Education, B.P.H.E.

#### III.—DIPLOMAS

##### 1.—*In Medicine*

Diploma of Public Health, D.P.H.; Diploma in Medical Radiology, M.R.

## 2.—In Nursing

Diploma in Public Health Nursing; Diploma in Teaching and Supervision in Hospital Schools of Nursing.

## HOODS

Each degree has its distinctive hood, as follows:

B.A.—Black, bordered with red silk.

B.Com.—Black, bordered with green silk.

B.P.H.E.—Black, bordered with red silk, bordered with white silk.

M.A.—Black, lined with scarlet silk, bordered with scarlet silk.

M.Com.—Black, lined with green silk, bordered with green silk.

B.D.—Black, lined with purple silk, bordered with purple silk.

M.D. and C.M.—Scarlet silk, bordered with white silk.

M.Sc.(Med.)—Scarlet silk lined with white silk, bordered with white silk.

B.Sc.—Black, bordered with yellow (old gold) silk.

M.Sc.—Black lined with yellow silk, bordered with yellow silk.

B.N.Sc.—White silk, bordered with scarlet silk.

D.Sc.—Yellow silk, bordered with black.

D.D.—Purple silk lined with white silk, bordered with white.

LL.D.—Black silk lined with blue silk, bordered with blue.

Ph.D.—Black silk lined with purple, bordered with white.

## COUNCIL OF LEGAL EDUCATION OF GREAT BRITAIN

Queen's University has been approved by the Council of Legal Education of Great Britain and her degree examinations now qualify students for admission at any one of the four Inns of Court. Regulations for entry at any one of the Inns may be seen at the office of the Registrar.

## THE STUDENTS' MEMORIAL UNION

The first Students' Memorial Union which was built to commemorate the service of students and graduates of Queen's University in the First World War, was destroyed by fire in September 1947 immediately before the opening of the session. Temporary dining and lounging accommodation for men students was arranged in McLaughlin Hall and reconstruction of the Union was begun at once. By September 1948, the Great Hall, the coffee shop and some lounging

rooms were ready for use. The completed building was opened formally in October 1949.

Every male student is a member of the Union, which is really a club where the men of all faculties may meet in a University building designed for that particular purpose and privilege.

There are the usual club facilities, a dining hall, lounge and billiard rooms, reading rooms, committee rooms, and guest rooms for alumni and visitors to the University.

### CO-OPERATIVE RESIDENCES

Berry House and Collins House, operated by the Science '44 Co-operative Inc., are open to men students of all faculties. Room and board for the session 1951-52 was \$10 per week. For further information write to the Membership Committee, 329 Earl Street, Kingston, Ontario, enclosing a self-addressed stamped envelope.

### INFORMATION FOR WOMEN STUDENTS

The Dean of Women has offices in both the New Arts Building and Ban Righ Hall and will welcome enquiries from students regarding anything pertaining to their academic life or other problems before and throughout their university Course.

Accommodation for about 275 women students is provided in Ban Righ Hall and its new Adelaide wing and in five nearby annexes, Goodwin House, Gordon House, Muir House, Matheson House and Baker House.

All first year students, not resident in the city of Kingston, are expected to live in one of these university residences, and approximately 160 places will be held until mid-September for new students; but if this number prove insufficient the additional new students will be assisted in finding suitable lodgings and will be expected to come to Ban Righ Hall for meals. Permission to make arrangements other than the above must be obtained from the Dean of Women.

About 115 upper year students will be in residence.

Ban Righ Hall is to some extent a centre for all women students. It has two common rooms and two dining halls, the latter, with cafeteria service at noon, being available to non-resident students for lunch.

During the summer the University residences are open for the benefit of all women students attending the Summer School and the services of the Housing office are also available.

Application forms for admission to the University residences and an information leaflet regarding rates, residence rules, etc. may be obtained from the office of the Dean of Women.

### *Gymnasium Costume*

A regulation gymnasium costume is worn by women students. This may be ordered at the first gymnasium class in the fall term. White badminton shoes and socks are worn with the suit.

Any bathing suit may be worn in the University swimming pool.

### *Co-operative Residences*

Boucher House, operated by the Science '44 Co-operative Inc., is open to women students who have completed their first academic year.

Room and board for the session 1951-52 was \$10.00 per week.

For further information write to The Membership Committee, 144 Lower Albert Street, Kingston, Ontario, enclosing a self-addressed, stamped envelope.

## EXPENSES

At the present time the average cost of a student's board is from \$10 to \$12 a week and for a room from \$4.50 to \$6 a week.

Lists of Boarding Houses for men students may be obtained from the Secretary, Housing Bureau, Queen's University. Meals may be obtained at the cafeteria in the Students' Union.

See FEES for other expenses.

## PHYSICAL WELFARE OF STUDENTS

### A. HEALTH INSURANCE

Queen's University administers a Health Insurance Fund by arrangement with the Alma Mater Society and the London Life Insurance Company. The fund is derived from a special fee of \$12.50 paid by each winter student and is used to provide medical and hospital care as follows:

#### I. MEDICAL CARE.

The services of the University Medical Officer are available to students without charge.

Office: Kingston General Hospital—Telephone 22821. Entrance by way of the Ambulance driveway (on Stuart Street, west of Front Entrance), turning left and up the short flight of steps.



Hours: Monday, Tuesday, Thursday, Friday —

Women: 4.15 p.m. - 4.45 p.m.

Men: 4.45 p.m. - 5.45 p.m.

Wednesday and — Women: 12.30 p.m. - 1 p.m.

Saturday Men: 1 p.m. - 1.30 p.m.

A charge of \$2.00 is made by the Medical Officer for calls to the students' rooms.

A student may choose another physician or obtain the services of a specialist, surgeon, or consultant, but the University pays no part of the charge thus incurred, except as follows:

If, in the opinion of the Medical Officer, the services of a specialist or consultant are required, the University undertakes to contribute toward the payment of the specialist's fee, \$5.00 for any one disability but will make no payment for dentistry, optometry, X-rays, massage, electrical therapy, and similar special treatments.

The cost of filling prescriptions is not provided by the University. The Kingston General Hospital, between the hours of 3.30 and 4.30 p.m. will fill prescriptions at cost plus 10%.

## II. HOSPITAL CARE.

Of the student fee of \$12.50, \$10.75 is paid to the London Life Insurance Company for the following services:

A. Hospital services, including room, food, regular floor nursing service, and special services up to \$27.50 for any single illness, are provided from the day of registration until the final examination is written, to the extent of \$5.50 per day. Any additional payment must be made by the student. Payment is limited to thirty-one days for any single illness and will not cover hospitalization of less than eighteen hours. The medical care is provided by the University through the University Medical Officer.

B. Surgical treatment, including treatment of injuries, is provided without restriction as to the time of hospitalization. The student may choose his own surgeon.

C. If special nurses over and above the regular staff are required or engaged the cost must be borne by the patient.

## B. PHYSICAL EXAMINATION

All students registering for the first time at a winter session of the University are required to have a physical examination. At the

## GENERAL INFORMATION

beginning of the session the University Medical Officer sets up a panel of physicians and psychiatrists to make the examination. Each student is given an appointment. Those for whom the hours named are inconvenient should arrange for other students to take their places.

## C. X-RAY CHEST SURVEY

By a regulation of the Senate of the University the students in the first and fifth years of the Medical Faculty and the first and final years of the other faculties and schools are required to have an X-ray examination of the chest each year. An appointment is made for each student and anyone who fails to report is required to take the X-ray at some time later at his own expense.

## D. CERTIFICATE COVERING ABSENCE FROM CLASS

A student not receiving hospital care but alleging illness as a reason for missing lectures or laboratory work must present a doctor's certificate immediately at the close of treatment in order to receive consideration.

## E. VACCINATION

Every student registering for the first time must submit evidence of successful vaccination against smallpox.

## STUDENT SELF-GOVERNMENT

Queen's was the first University in Canada to introduce student self-government. All students are members of the Alma Mater Society, the chief instrument of student government, and are expected to share in its duties and responsibilities.

## ALMA MATER SOCIETY LECTURE

In 1939, as a contribution from the student body to the Centenary Endowment Fund, the Alma Mater Society gave the University its accumulated reserve of \$1,711. The income is used to provide an annual lecture known as the Alma Mater Society Lecture.

## FRATERNITIES

By resolution of Senate no student registered with the University may form or become a member of any chapter of any externally-affiliated fraternity or sorority at or near Kingston.



## MILITARY SERVICES

## UNIVERSITY NAVAL TRAINING DIVISION

The University Naval Training Division, Queen's University, was organized in March, 1943, under the direction of Lieutenant S. T. Hill, Commanding Officer H.M.C.S. "Cataraqui".

University Naval Training Divisions were established in Canadian universities during the war to provide naval training for university students before entry into active service in the Navy. From this source came many hundreds of keen young men who had excellent war records in the service. These Divisions are being continued in the universities to provide a Naval Officers' training programme through which university students may become commissioned officers in the Royal Canadian Navy (Reserve). Opportunity is provided also in certain branches for entry into the Royal Canadian Navy (Permanent Force) as commissioned officers who will follow the Navy as a career.

The programme consists of sixty hours' training during the academic year given at H.M.C.S. "Cataraqui", and a minimum of two weeks' training aboard ship during the summer.

## CANADIAN OFFICERS' TRAINING CORPS

The Queen's University Contingent of the C.O.T.C., formed in 1914 by Lt.-Col. A. B. Cunningham was reorganized following the First World War by Col. A. Macphail, C.M.G., D.S.O.

The object of the C.O.T.C. training policy is to qualify selected University undergraduates for commissions on graduation in the various corps of the Active Force, Reserve Force, and Supplementary Reserve Force of the Canadian Army.

The training programme consists of short theoretical courses in Military Studies at the University and two or three summer courses of four months at the Active Force Corps Schools at officers' rates of pay.

## R.C.A.F. RESERVE UNIVERSITY FLIGHT

The Reserve University Flight (Queen's) was organized in 1949 and is commanded by Squadron Leader J. E. Wright.

Selected undergraduates are given winter lectures on general subjects and in the summer months attend R.C.A.F. Schools at which

they receive training in the technical or non-technical branch of their choice. Vacancies also exist for Flight Training under the University Air Training Plan. Cadets are paid for both winter and summer training.

Cadets are given three years training and are appointed as Officers in the R.C.A.F. (Regular and Reserve) on completion of their course.

### EMPLOYMENT SERVICE

An Employment Service has been in successful operation at the University for several years. It is under the jurisdiction of the Service Control Committee of the Engineering Society and administered by the Secretary of the General Alumni Association. It is financed by the Engineering Society and the University. The objects of the Service are to assist graduates in all Faculties to secure suitable positions, and to help students to obtain work during vacation periods.

Communications should be addressed: Manager, Employment Service, Queen's University.

### REGISTRATION

All students are required at the beginning of each session to have their names entered upon the University Register.

Intramural students must register in person, paying full fees for the session. Those registering before the opening of the session are charged the regular fee, but those registering on or after the first day of the session are charged an extra fee of \$5. In addition those who have not previously obtained permission to defer registration must pay a special late fee of \$3 a day from September 23 to October 4 if registering in the first year, from September 25 to October 4, if registering in an upper year. No student may register after October 4 unless he has obtained special permission before the opening of session.

For extramural registration see REGULATIONS REGARDING EXTRAMURAL WORK.

## ADMISSION TO THE FACULTY OF ARTS

1. Candidates desiring to enter the Faculty of Arts should make application during the summer on forms supplied by the Registrar.

The application should be accompanied by matriculation or other certificates. These will be returned when the candidate's standing has been determined.

### I. ADMISSION BY MATRICULATION

2. Matriculation examinations are conducted for the universities of Ontario by the University Matriculation Board. Details regarding these examinations may be found in a separate publication entitled **ENTRANCE REQUIREMENTS**. This booklet contains also a list of the Entrance and Matriculation Scholarships and the conditions of award.

3. The requirement for admission to the Faculty of Arts is:

- (a) The Secondary School Graduation Diploma or its equivalent, including English, a second language, History, Mathematics and two options.
- (b) Grade XIII standing or its equivalent in English, Latin (two papers) or Mathematics (at least two papers) and two or three other subjects. Students entering with as few as four subjects, that is, English, Latin or Mathematics and two others, are required to have not lower than third class Honours standing in at least three of these subjects and are conditioned in the subject in which they lack standing. This condition may be removed by writing off the Grade XIII paper or papers in the subject concerned, or by taking an extra course at the University.

Candidates entering Mathematics 2 with standing in only two parts of Grade XIII Mathematics are required to attend a tutorial class and pass an examination in the third part before receiving credit for Mathematics 2.

4. Grade XIII examinations are held in the following subjects: Latin, English, History, Mathematics (Algebra, Geometry, Trigonometry, and Problems), Greek, German, French, Spanish, Italian, Music, Physics, Chemistry, Biology. The pass standard is fifty per cent in each paper.

5. Candidates with the Interim First Class Certificate who have successfully qualified for the Permanent First Class Certificate by attending a second year at an Ontario Normal School are allowed towards an Arts degree one course in each of English and History.

6. A complete outline of the courses for degree is given under every subject in the departmental regulations. Candidates for admission to Honours Courses should write the Grade XIII papers in the two subjects which will be the major and minor for the degree of B.A., and three others chosen from the compulsory courses on the degree programme they wish to follow. The most useful selection of subjects is listed under the various courses. Other selections are acceptable but must include English and Latin or Mathematics. Candidates preparing for Honours in English and History are advised to take in Grade XIII

English (*Literature and Composition*)

History

Latin (*Authors and Composition*)

one of French (*Authors and Composition*)

German (*Authors and Composition*)

Greek (*Authors and Composition*)

a science which may be selected from Biology (Botany and Zoology), Chemistry, Physics.

Similarly candidates for Honours in modern languages are advised to take Grade XIII

English (*Literature and Composition*)

Latin (*Authors and Composition*)

two of French (*Authors and Composition*)

German (*Authors and Composition*)

Spanish (*Authors and Composition*)

a science which may be selected from Biology (Botany and Zoology), Chemistry, Physics.

Candidates interested in Honours Classics are advised to take

English (*Literature and Composition*)

Latin (*Authors and Composition*)

Greek (*Authors and Composition*)

a science which may be selected from Biology (Botany and Zoology), Chemistry, Physics

a fifth subject which may be freely chosen.

Candidates interested in a course in History or Economics or Philosophy are advised to take

English (*Literature and Composition*)

History

Latin (*Authors and Composition*) or Mathematics (at least two of Algebra, Geometry, Trigonometry)



- a science which may be selected from Biology (Botany and Zoology), Chemistry, Physics
- German (*Authors and Composition*)
- one of French (*Authors and Composition*)
- Greek (*Authors and Composition*)

Candidates preparing for a course in Mathematics are advised to take

- English (*Literature and Composition*)
- Mathematics (Algebra, Geometry, Trigonometry)
- Physics
- one of French (*Authors and Composition*)
- German (*Authors and Composition*)
- Greek (*Authors and Composition*)
- a fifth subject which may be a foreign language, a science, or History.

Candidates for a course in science are advised to take

- English (*Literature and Composition*)
- Mathematics (Algebra, Geometry, Trigonometry)
- one of French (*Authors and Composition*)
- German (*Authors and Composition*)
- Greek (*Authors and Composition*)
- two of Chemistry, Biology (Botany and Zoology), Physics, selected so as to give standing in the two sciences in which the candidate wishes to proceed.

Candidates preparing for Commerce are advised to take

- English (*Literature and Composition*)
- Mathematics (Algebra, Geometry, Trigonometry)
- Students from High Schools of Commerce may offer Grade XIII standing in Mathematics of Investment in place of Algebra as part of the requirement in Mathematics.
- a science which may be selected from Biology (Botany and Zoology), Chemistry, Physics
- a language
- a fifth subject which may be History, a language or a science not already offered.

Candidates preparing for a general Pass course are advised to take

- English (*Literature and Composition*)
- Latin (*Authors and Composition*) or Mathematics (at least two of Algebra, Geometry, Trigonometry—see Section 3(b), page 47)
- three further subjects which may be selected at will from the subjects of Grade XIII (see page 47).

Candidates preparing for the Combined Course leading to degrees in Arts and in Physical and Health Education are advised to take

English (*Literature and Composition*)

Mathematics (at least two papers, of which one should be Trigonometry)

Physics

Chemistry

An optional subject.

## ADMISSION OF EX-SERVICE MEN AND WOMEN

A. Ex-service men and women applying for admission to the Faculty of Arts are required to offer Matriculation standing as approved by the National Conference of Canadian Universities in June, 1944, as follows:

Grade XII:

1. English
2. French or another language
3. Mathematics (Algebra and Geometry)
4. One of: History

A language not already chosen selected from Latin, Greek, French, German, Spanish or Italian

A science: Physics or Chemistry or Agriculture.

If, in addition, they can offer subjects at Grade XIII level, they are granted standing up to a total of five. Ex-service men and women entering with as many as four subjects of Grade XIII are admitted to the second year without condition.

B. Queen's University works in close co-operation with the Kingston Branch of the Department of Veterans Affairs and facilitates where possible all matters pertaining to the training provisions as set out in Post Discharge Re-establishment Order, P.C. 5210.

## II. ADMISSION BY EQUIVALENT EXAMINATION

A. Examinations Equivalent to the Ontario Secondary School Graduation Diploma

The following certificates recognized as equivalent to the Ontario Secondary School Graduation Diploma may be accepted in so far as they meet the admission requirements of Queen's University:



Alberta .....	Junior Matriculation (Grade XI).
British Columbia .....	Junior Matriculation (Grade XII).
Manitoba .....	Grade XI.
New Brunswick .....	Junior Matriculation.
Newfoundland .....	Grade XI.
Nova Scotia .....	Grade XI (average 60, minimum 50).
Prince Edward Island ....	First Class License or Second Year Certificate from Prince of Wales College.
Quebec .....	( Quebec High School Leaving. McGill Junior Matriculation.
Saskatchewan .....	Grade XI.

### B. Examinations Equivalent to Grade XIII

The following certificates are recognized as equivalent to the Ontario Grade XIII certificate in the subjects in which at least 50% has been made in each paper:

Alberta .....	Senior Matriculation (Grade XII).
British Columbia .....	Senior Matriculation (Grade XIII).
Manitoba .....	First Class.
New Brunswick .....	Senior Matriculation.
Nova Scotia .....	Grade XII.
Prince Edward Island ....	Honour Diploma of Third Year, Prince of Wales College.
Quebec .....	( McGill Senior Matriculation. Senior High School Leaving Certificate.
Saskatchewan .....	Grade XII.
Great Britain .....	The General Certificate of the various English Universities and the Welsh Joint Education Committee with pas- ses in at least five subjects of which two must be at the advanced level.

### III. ADMISSION TO ADVANCED STANDING

Students applying for admission to advanced standing with allowance on credits at another university must have an official certificate of standing with a statement of honourable dismissal forwarded to

the Registrar for consideration. They are given equivalent standing but must comply with all regulations of Queen's University governing the Course they wish to complete.

No credits obtained at another institution are accepted for any of the last five classes offered by a candidate for a degree at Queen's University.

#### IV. ADMISSION BY SPECIAL REGULATION

Unmatriculated students who present certificates showing that they are over the age of twenty-one years may be admitted conditioned in the subjects of matriculation if they satisfy the Board of Studies that they can profitably undertake university work.

Candidates admitted under this regulation may remove entrance conditions by passing course one of the subject in which they lack matriculation; they may remove conditions in languages by passing a preparatory course in the language concerned, e.g., German A, Spanish A. They should note that a course used to remove an entrance condition may not be counted as a credit towards a degree.

## REGULATIONS REGARDING EXTRAMURAL WORK

All inquiries regarding regulations should be addressed to the Registrar.

In order to meet the needs of students who are unable to do all their work in residence, of teachers in actual service who wish to improve their professional qualifications in certain subjects, and of those who, though unable to attend the regular classes, are yet desirous of studying under competent direction, the University conducts a system of extramural instruction. This work is as nearly as possible identical with that taken up by the intramural students and the same examinations are set for all. Candidates who fulfil the requirements of residence and otherwise comply with the conditions stated below may qualify for the various degrees to which their courses lead.

For details of the work offered for the summer of 1952 and winter 1952-53 see page 60.

### CONDITIONS OF ADMISSION TO EXTRAMURAL WORK

1. Extramural students are of two types—special and regular.

(a) Special students are those who do not wish to proceed towards a degree. They may register for any courses in which they are particularly interested but must conform to regulations regarding date of registration, fees and regularity of work.

Special students are subject to all the regulations affecting regular students (see page 99, section 2).

(b) Regular students are those who are proceeding to a degree.

2. As in the case of intramural students, the requirement for admission to the Courses of study leading to the degree of Bachelor of Arts is

(a) The Secondary School Graduation Diploma including English, a second language, History, Mathematics and two options.

(b) Grade XIII standing in English, Latin (two papers) or Mathematics (at least two papers) and two or three other subjects. Students entering with as few as four subjects, that is English, Latin or Mathematics and two others, are required to have not lower than third class Honours standing in at least three of these subjects and are conditioned in the subject in which they lack standing. This condition may be removed by writing off the Grade XIII paper or papers in the subject concerned, or by taking an extra course at the University.

3. Unmatriculated students who present certificates showing that they are over the age of twenty-one years may be admitted conditioned in the subjects of Matriculation if they satisfy the Board of Studies that they can profitably undertake university work. Candidates admitted under this regulation may remove entrance conditions by passing course 1 of the subject in which they lack Matriculation, or by completing Grade XIII standing in the subject concerned. They may remove conditions in language by passing a preparatory course in the language concerned, e.g., German A, Spanish A. They should note that an "A" course used to remove an entrance condition may not be counted towards a degree.

4. Candidates holding the Interim First Class Teaching Certificate may register extramurally on academic courses leading to the Permanent Certificate even though they do not offer the full Matriculation requirement for admission to the Faculty of Arts. If such candidates wish to proceed to a degree in Arts they must remove entrance conditions as indicated above.

5. Intramural students may become extramural students only by special permission of the Faculty.

6. There are two sessions in the year for extramural students. The winter session begins in September and ends with the April examinations; the summer session begins in April and ends with the August examinations. The Summer School forms part of the summer session though it is possible to work extramurally in certain courses throughout the summer without attending the Summer School.

7. (a) Extramural students may not register for more than four courses in the academic year. They may register in the winter (September-April) for as many as two courses or four half-courses, and in the summer\* (April-August) for two courses or three half-courses.

(b) The courses selected in each year are subject to the approval of the Board of Studies and, in the case of candidates for degrees, must conform to the regulations for concentration, distribution, and sequence of work.

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\* The Calendar is issued in the spring but is not in force until the following autumn. The work of advanced whole courses given at the Summer School is based on the prescription in the calendar for the next session, since these courses are completed during the following winter.



(c) Before registering students should consult the time-table of lectures, as they may not register for either winter or summer work in two courses which meet at the same hour. The summer time-table is given in the Announcement of Summer School and Extramural Work.

8. (a) Extramural students should register two or three weeks before the session opens so that they may receive the preliminary instructions and provide themselves with books in time to start work promptly. They are allowed to register up to September 17 for the winter or April 10 for the summer at the regular fee, and up to September 24 or April 17 on payment of an extra fee of \$5. Only under exceptional circumstances and by special permission of the Faculty is registration accepted after these dates.

(b) Extramural students may not receive the examination returns before the last date of registration but they should send fees to the Registrar within the required dates, stating the courses in which they wish to register if successful in their examinations. Necessary changes may be made later.

9. No one is permitted to register at Queen's University in the same session as he is taking work from another educational institution, or writing on any examinations other than those leading to the Honour Graduation Diploma. No credits obtained at another institution are accepted for any of the last five courses offered by a candidate for a degree at Queen's University.

#### FEES

10. The fees payable upon application for registration are as follows:

##### Extramural and Summer School Fee.

(a) This is a single inclusive fee covering registration by the specified date, use of the library, tuition whether given extramurally or in the Summer School or partly each way, and the first examination (not a supplemental) if taken within two years. For a student in the Summer School the fee also includes athletics, the MacClement Scholarship contribution and membership in the Summer School Association.

\$40.00 for each whole course taken by correspondence  
or by correspondence and at the Summer School.

\$20.00 for each half course.

\$45.00 for each two-hour class taken at the Summer School.



Fee for Pro Tanto Allowance.

(b) Students wishing to have courses credited towards a degree on work done at other academic institutions, must pay a fee of \$10.00 for pro tanto allowance at the time of their first registration.

Fees may be paid in two equal instalments, in which case an additional \$1 is added to the first instalment. Students registering in September must pay the first instalment by September 17, the balance on or before December 1. Students registering in April must pay the first instalment by April 10, the balance on or before July 3.

11. Extramural students who enter as intramural students during the winter session will have their extramural fees applied on intramural charges. (See section 16.)

12. No refunds will be made. In case of sickness, but under no other conditions, an application to have fees carried over will be considered if it is made within one month of registration and is accompanied by a doctor's certificate.

#### MINIMUM RESIDENCE REQUIREMENTS

13. The University does not undertake to make it possible for a student to get a degree by satisfying merely the minimum residence requirements given below, since in some subjects only a limited amount of instruction can be given extramurally or in the Summer School. In the sciences, for example, all the laboratory work must be done at the University and a student specializing in science may find it necessary to spend two or three years in residence.

Candidates for degree must complete successfully at least two winter sessions, or one winter and three summer sessions, or five summer sessions in attendance at the University. Intramural students transferring from universities of accepted standing to the final year of their Course may complete residence requirements by attending one regular winter session or two Summer Schools.

#### CONDUCT OF EXTRAMURAL CLASSES

(See also section 26)

14. The method of giving extramural instruction necessarily varies with the subject. Detailed information is contained in the instruction sheets provided from time to time. These specify the prescribed reading, assign exercises and essays to be written, and in some cases give the substance of intramural lectures. The first instalment of work is sent to students as soon as they register. The date of each essay or exercise coming in, and of each criticism or

fresh piece of work going out, is recorded at the office of the Department of University Extension. Each essay or exercise is examined and returned to the writer with criticisms and suggestions.

Students should address their work and all inquiries regarding their work to the Department of University Extension, Queen's University, Kingston, Ontario.

#### REGULARITY OF WORK

15. All exercises must be sent in by the dates specified or they will be returned unmarked and without credit.

#### TRANSFER FROM EXTRAMURAL TO INTRAMURAL CLASSES

16. Extramural students may become intramural students during the winter session in those courses in which they have satisfactorily completed the work prescribed up to the date of transferring. Fees already paid may be applied on intramural charges.

17. Students who transfer to intramural work before January may add enough half-courses to give them five courses in the second term if such half-courses are available and the prerequisite work has been done.

#### TEXT-BOOKS

18. Text-books may be obtained from the Technical Supplies Store, Queen's University Grounds.

#### LIBRARY FACILITIES FOR EXTRAMURAL STUDENTS

19. Extramural students are expected to buy all text-books prescribed. They should also make generous provision for the purchase of other books bearing on their work, as the library cannot undertake to provide enough duplicates to serve all the needs of students not in residence.

20. Three books may be borrowed at one time, provided that no two relate to the same piece of work. Unless a special arrangement is made, a book may be kept only two weeks from the date on which it is received.

21. No fee is charged for the use of the library but extramural students must send to the Librarian a deposit of \$2 for the use of one book, \$4 for two books, and \$5 for three, as insurance against loss. Books may be exchanged as often as the borrower wishes; and when all are returned the deposit will be repaid on request.

22. All communications concerning books and deposits must be addressed to The Librarian, Queen's University, Kingston, Ontario.

### EXAMINATIONS

Intramural and extramural examinations are the same in all subjects and are held at the same time. It is impossible to modify the examination schedule to suit the personal convenience of students.

23. Examinations are held in January, April, and August, as follows:

(a) Examinations in half-courses of the first term are held in January (see page 6).

(b) Examinations in all whole courses and in half-courses of the second term are held in April. Examinations in Pass courses (numbered under 10) and in such Honours courses as may be offered in the summer, may be postponed until the autumn, but postponement lessens the amount of new work which may be completed in August.

(c) Ordinarily an extramural student may not write in August on more than two courses or three half-courses. He may, however, write on three courses, if examinations in one or more have been postponed from April.

24. Application. Application for examinations in the particular courses on which a student proposes to write, accompanied by the proper fees, must reach the office of the Department of University Extension by December 1 for the January examinations, by February 10 for the April examinations, and by July 10 for the August examinations. The fees for supplemental examinations are \$3 for each half-course examination and \$6 for each whole course examination, with an additional charge of \$3 for late application if accepted.

25. Candidates are charged a fine of \$2.00 if they fail to notify the Registrar, at least ten days before the beginning of the examinations, that they do not intend to write on a subject for which they have applied.

26. Eligibility. Only those who have fulfilled requirements of registration and regularity of work will be admitted to examinations. No one is eligible who has done less than seven-eighths of the prescribed work. Those who do not fulfil this requirement in any course must register again, pay the fees and repeat the exercises.

27. Failures and Supplementals. Students who fail in an examination may write a supplemental examination at the next regular examination period, provided an examination is held in the subject concerned. This privilege applies to all Pass courses and to the

first courses in Honours. Supplemental examinations may not be postponed beyond the period specified above.

28. Re-writing for higher standing. Students who have passed the examination in a course may re-write for higher standing. This privilege is extended to the third examination period after the first time of writing.

29. Postponement of examinations. Students who have qualified for examination may postpone writing for two years from the date of the first registration in the course concerned. Those who elect to postpone examinations do so at their own risk. Courses may be discontinued or changed, and special papers cannot be set. Those who postpone writing beyond the specified limit must repeat the tutorial work of the course.

30. Oral and practical tests, prescribed by modern language and science departments, must be taken at the University. In modern languages these tests are held at the end of March or at the close of the Summer School.

31. Local centres for extramural examinations have been established in most of the larger cities and towns throughout Canada and a list of such centres is sent to all extramural students a month in advance of the examinations. Consideration is given to an application to establish a new centre. The application, accompanied by the special fee of \$10, must be made by December 1 for January examinations, by February 10 for April examinations, and by July 10 for August examinations.

#### DETERMINATION OF STANDING

32. See sections 26 and 27 of GENERAL REGULATIONS on page 103.



## EXTRAMURAL AND SUMMER SCHOOL WORK

On pages 60 and 61 tables show the courses offered through extramural and Summer School instruction in the summer of 1952 and the winter of 1952-53 and the cycle of courses for the next five years.

Offerings are planned so that students' degree programmes may be completed in the normal time. In each Calendar there appears a cycle of courses for five years in advance. Students should plan their extramural and Summer School work in accordance with this cycle. So far as possible courses listed in the cycle will be given as advertised.

## EXTRAMURAL WORK—SUMMER 1952 - 53

	Summer Extramural: if the course is offered at the Summer School as well as by correspondence it is marked with an asterisk.	Winter Extramural
Latin .....	1, 2	1, 2
Greek .....	A, 1, 2	A, 1, 2
Greek and Rom. Hist. . .	4	4
Classical Literature . . .	1	1
English .....	1, 2*	1, 2, 14α, 14b, 20
French .....	1, 2*, 3*	1, 2
German .....	A, 1, 2	A, 1, 2, 10
Spanish .....	A*, 1, 2*, 6	A, 1, 2, 6, 10
History .....	3*, 6	3, 6
Economics .....	4*	4
Politics .....	2*	2
Commerce .....	63	63
Philosophy .....	1*	1
Psychology .....	2*, 4*, 6, 8	2, 4, 6, 8
Mathematics .....	1, 2*	1, 2, 3α, 7b, 10α, 11b
Physics .....	1, 2*	1, 2 (continued at S.S.)

\* see table on page 61



## SUMMER SCHOOL COURSES — 1952-1956

	1952	1953	1954	1955	1956
Art .....	2	3	1	2	3
Astronomy .....		1		1	
Biology .....	1, 16	1, 10	1, 16	1, 10	1, 16
Chemistry .....	1	2	1	2	1
Drama .....	1*	1*	1*	1*	1*
Economics .....		4*			4*
English .....	2*, 3, 10*	2*, 5, 19	2*, 7, 15	2*, 3, 20	2*, 5, 10*
French .....	2, 3	2, 10	2, 3	2, 10	2, 3
Geology .....	1	1	1	1	1
Geography .....	1	1	1	1	1
History .....	3, 13*	5, 16*	3, 13*	6, 16*	3, 13*
Mathematics .....	2*, 10α, 11b	2*	2*, 10α, 11b	2*	2*, 10α, 11b
Music .....	SI*	1*	3*	1*	3*
Philosophy .....	1*	1*	1*	1*	1*
Physics .....	2		2		2
Politics .....	2*		2*		
Psychology .....	2, 4	2, 8	2, 6	2, 4	2, 8
Religious Knowledge .....		3		2	
Sociology .....	1*			1*	1*
Spanish .....	A, 2	A, 1	A, 2	A, 6	A, 1

\* Courses given two hours a day in Summer School, without preliminary exercises.

### THE SUMMER SCHOOL

The forty-third session of the Summer School begins at 8.00 a.m. on Thursday, July 3, 1952, and closes on Friday, August 15.

Students are expected to register on Wednesday, July 2. An extra fee of \$5 will be charged those registering after this date.

Courses are given in Art, Biology, Chemistry, Drama, Economics, English, French, Geography, Geology, History, Mathematics, Music, Philosophy, Physics, Psychology, Sociology, and Spanish. Libraries and laboratories are available for use as in the winter session.

Ban Righ Hall, the women's residence, is open during the summer and accommodates two hundred and seventy-five students. Applications for rooms should be sent as early as possible to the Dean of Women.

### PURPOSE OF THE SUMMER SCHOOL

The Summer School offers the advantages of university study to those who cannot attend the classes of the regular session.

It gives teachers an opportunity to improve their scholarship in chosen lines of study, to observe methods of teaching, and to become acquainted with books and equipment not otherwise available.

It gives intramural students who have lost standing through illness or other causes an opportunity of qualifying for the August supplemental examinations. Moreover, intramural students in their first or second years, who on account of ill health are unable to carry the required five courses, may, with the consent of the Board of Studies, take three or four courses in the winter and the rest extramurally in the summer, provided that they attend the Summer School.

It gives extramural students an opportunity to take the oral work required in the modern languages, to do in the laboratories the practical work required in the courses in science, and to satisfy the minimum residence requirements for the degree of Bachelor of Arts. (See section 13 on page 56.)

### ADMISSION

No examination is required for admission to the Summer School. The classes are open to all who desire to improve their scholarship or professional equipment. Candidates for a degree, however, must satisfy matriculation requirements before being admitted to the university work and examinations, and must register for summer work

in April. Furthermore, they must submit in May and June at least seven-eighths of the exercises and all the essays in those classes which require such work.

No student working for credit is allowed to register for more than two courses or three half-courses in the Summer School.

### EXAMINATIONS

No examinations are held in connection with the Summer School. Students desiring credit for their work should write at the regular University examinations in August. See sections 15, 23, 26 under REGULATIONS REGARDING EXTRAMURAL WORK.

### FEEES

See FEEES on page 55.

### FURTHER INFORMATION

The Announcement of the Summer School, containing full details concerning the work offered, is published each year in March, and is supplied on application.

All inquiries concerning the Summer School should be addressed to the Department of University Extension, Queen's University, Kingston, Ontario.

## FEES

Students who enter with Grade XIII (Senior Matriculation) standing or its equivalent and proceed to the Honours degree, shall pay in aggregate not less than the full sessional fees for four years. Pass students who enter with the above standing shall pay in aggregate not less than the full sessional fees for three years.

Fees must be remitted by accepted cheque, postal order, or bank draft payable to Queen's University. Cheques or bank drafts on any point where there is a branch of the Bank of Montreal are received at par; all other cheques should have  $\frac{1}{2}$  of 1%, minimum 15c, added to cover exchange, or be drawn plus exchange.

### INTRAMURAL

Fees are payable each year upon registration.

A student is not registered and may not attend classes until he has paid the required fees.

Sessional Fee—including Registration, Tuition, Library, Examinations .....	\$230 00
Student Interests—including Health Insurance, Union, Faculty Societies, Alma Mater, Journal, and Athletics (the athletic fee which is part of student interests gives admission to all home games except playoffs) .....	\$ 43 50

Fees may be paid in two instalments, in which case an additional \$5 is added to the first instalment. The first instalment and the laboratory fee must be paid at the time of registration in September, the balance on or before January 5th, 1953. No student is admitted to classes until the above conditions have been complied with, nor is he permitted to continue the work of the second term until the fees have been paid in full.

### YEAR FEES

A year fee, ordinarily not more than \$2.00, is collected by the year societies shortly after the opening of the session.

### GRADUATE FEES

Candidates for the degree of Master of Arts must pay

Tuition fee .....	\$200 00
Student Interests. fee .....	43 50

If the work for the Master's Course is spread over two years, the student pays each year a total sessional fee of \$148.50.

The fees specified below are payable as they are incurred.

#### Laboratory Fee:

A fee is charged for all courses in science:

For each course in science except Chemistry ..	\$ 5 00
For each course in Chemistry .....	10 00
Maximum charge for courses in science .....	20 00

#### Special Charges:

Pro tanto allowance on work done in another University .....	10 00
Late registration (see also note, page 5), minimum ..	5 00
Change of course after registration .....	2 00
Fee for a single course, seminar or lecture, taken above the normal number of five courses ...	50 00
Late application—for examination or graduation .....	3 00

Special examinations given at the University when a regular examination is missed:

One examination .....	5 00
Two or more examinations .....	10 00

Examinations at outside centres:

Each whole course .....	6 00
Each half-course .....	3 00

Supplemental examinations:

Each whole course .....	6 00
Each half-course .....	3 00

#### Special students not paying full fees:

Each course taken .....	50 00
(Student interests and Laboratory fees as above)	

#### Graduation:

Bachelor of Arts .....	10 00
Bachelor of Commerce .....	10 00
Bachelor of Nursing Science .....	10 00
Bachelor of Physical and Health Education ..	10 00
Master of Arts .....	20 00
Master of Commerce .....	20 00
Doctor of Philosophy .....	50 00
Extra fee for degree <i>in absentia</i> .....	10 00



## EXTRAMURAL

Extramural and Summer School Fee—(This is an inclusive fee covering Registration, Tutorial work, Summer School, Examinations (except supplementals), Library, the MacClement Scholarship contribution and membership in the Summer School Association.)

Each whole course taken extramurally or by extramural and Summer School work .....	\$ 40 00
Each half-course .....	20 00
Each two-hour class taken at the Summer School .....	45 00

## Special Charges:

Fee for pro tanto allowance on work done in another university .....	10 00
Laboratory fee for Physics, Chemistry, Biology .....	3 00
Laboratory fee for Geology or Geography .....	5 00
Fee for late registration .....	5 00
Fee for late application for examination .....	3 00
Change of work after registration .....	2 00
Registration fee (payable only by non-registered students applying for examinations in courses already passed) .....	10 00
Establishment of new examination centre .....	10 00

## Fee for supplemental examinations:

Each whole course .....	6 00
Each half-course .....	3 00
Fee for late application .....	3 00

## Graduation:

The fees are outlined on page 66, under GRADUATION.

Fees may be paid in two equal instalments, in which case an additional \$1 will be added to the first instalment. Students registering in September must pay the first instalment by September 17, the balance on or before December 1. Students registering in April must pay the first instalment by April 10, the balance on or before July 2.

# SCHOLARSHIPS, PRIZES, AND MEDALS

## I. MATRICULATION SCHOLARSHIPS

For a list of Matriculation Scholarships and the conditions of award see the publication entitled SCHOLARSHIPS AND PRIZES.

## II. SCHOLARSHIPS IN ARTS

Scholarship awards are governed by the following regulations:

1. Scholarships may be held only by students in attendance in the Faculty of Arts in the year following the award.
2. Scholarships are not ordinarily awarded to students who make lower than first class standing.
3. A student may not hold more than \$400 in Faculty scholarship money in any one year.
4. In any year in which a scholarship cannot be given under the normal terms of award, the Department concerned may make special recommendation to the Faculty.

## LANGUAGE AND LITERATURE

### DEPARTMENT OF CLASSICS

#### Frederica McCulloch Scholarships in Latin

Founded by the late Andrew McCulloch, M.A., of Thorold.

1. Value \$60: awarded to the student who has the highest standing on the April examination in Latin 1.
2. Value \$80: awarded to the student who has the highest standing on the April examination in Latin 2.
3. Value \$60: awarded to the student who has the second highest standing on the April examination in Latin 2.
4. Value \$120: normally awarded at the end of the first year of Honours on the standing obtained thus far in Latin courses taken at the University.\*
5. Value \$80: normally awarded at the end of the first year of Honours on the standing obtained thus far in Latin courses taken at the University.\*

## W. W. NEAR SCHOLARSHIPS IN CLASSICS

Founded by the late W. W. Near, Esq., of Toronto.

1. Value \$100: normally awarded at the end of the second year of Honours, chiefly on the standing obtained in courses of the Department of Classics. When candidates are of nearly equal merit, some preference will be given those who are taking Greek.\*
2. Value \$50: awarded to the student who has the highest standing on the April examination in Greek and Roman History 4.
3. Value \$50: awarded to the student who has the highest standing on the April examination in Classical Literature 1.

## SCHOLARSHIPS IN GREEK

The Maclellan Scholarship, founded by the late Hon. James Maclellan, LL.D., of Toronto; value \$20.

The Flossie May Bogart Scholarship, founded by the late Mrs. I. G. Bogart of Kingston in honour of Flossie May Bogart; value \$80.

These awards are made to students of outstanding ability and promise in Greek A or 1 or 2. When Greek A and 1 are taken in the winter and the following summer they will (for purposes of these awards) be considered as together forming one course. It will therefore sometimes be necessary to withhold announcement of these scholarships until the results of August examinations are known.

## DEPARTMENT OF ENGLISH

## Alexander Laird Scholarship in English 1

Value \$50. Founded in memory of the late Rev. Alexander Laird by his brothers and sisters and awarded annually to the student who makes the highest marks in English 1.

## The James Cappon Memorial Scholarship in English 2

Founded by Miss Alice L. Macnee of Kingston in memory of Dr. James Cappon, formerly Head of the Department of English and Dean of the Faculty of Arts.

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\* Note: These scholarships are intended to recognize outstanding promise in Honours work. If conditions warrant, they may be awarded at other stages than those prescribed here.

Value \$40: awarded to the student making the highest standing in English 2, provided that the student proceeds to further work in English the following year.

Special Scholarship for Highest Standing in Extramural English 2

Value \$25. Given by a graduate to the extramural candidate for degree who makes the highest standing in English 2, provided that the candidate proceeds with university work the following year. This scholarship is paid in two equal instalments on or about October 15 and March 15.

### Roberta McCulloch Scholarships in English

Founded by the late Andrew McCulloch, M.A., of Thorold.

1. Value \$30: awarded annually to the student standing second in English 2 (intramural).

2. Value \$50: awarded annually to the student standing highest in Grade A, English 3.

3. Value \$50: awarded annually to the student standing highest in Grade A, English 7.

4. Value \$40: awarded to the student having the highest standing in English 10.

5. Value \$100: awarded annually to the Honours student who having English as the major subject, stands highest in Grade A, in the final year examinations, provided that the student is proceeding to graduate work in Queen's University or another university.

### McIVER SCHOLARSHIPS

Founded by J. B. McIver, formerly Treasurer of Queen's University.

1. Value \$50: awarded to the student having the highest standing in English 5 who plans to proceed to further work in English.

2. Value \$50: awarded to the student having the highest standing in English 14.

3. Value \$50: awarded to the student having the highest standing in English 15.

4. Value \$50: awarded to the student having the highest standing in English 19.

### Mary Mewkill Memorial Scholarship in English

Value \$50: given by Miss Mary Mewkill of Poughkeepsie, New York, in grateful remembrance of her teachers and associates at



Queen's University. Awarded annually to the most outstanding student in the course in English covering the period from 1790 to 1830, taught for many years by Professor James A. Roy.

#### THE '01 FELLOWSHIP IN ENGLISH

Value \$80. Established by the class which graduated in 1901. Awarded to a student who will act as tutor in English during the following session.

#### ARTS '15 SCHOLARSHIP

(The capital sum is not yet fully collected)

Present value \$26. Founded as a memorial by the class of 1915. Awarded annually in turn by the Departments of English, Mathematics and History to the student with the highest standing in two Honours courses taken in the third year. Awarded in English in 1953, in Mathematics in 1954, and in History in 1955.

#### MCLQUHAM FOUNDATION IN ENGLISH

Value \$20. Founded by the parents of Mr. J. Max McIlquham, a student at Queen's University, 1912-15, who was killed on service overseas. Awarded for the best original poem, short story, or play.

Competitive papers must be submitted to the Registrar by April 1.

Each paper must bear a motto instead of the author's name, and must have attached to it a sealed envelope, bearing the same motto and containing a signed declaration that it is his unaided composition.

All successful compositions are the property of the University, and are at the disposal of the Senate.

#### Wilhelmina Gordon Foundation in English

Established by the Imperial Order, Daughters of the Empire, in appreciation of the work of Professor Wilhelmina Gordon, who served as National Educational Secretary from 1923 to 1937.

Value \$50: awarded to the Honours student in English standing highest in Class I in the final year examinations, provided that the student is proceeding to graduate work at Queen's University.

#### DEPARTMENT OF FRENCH

##### W. W. Near Scholarships in French

Founded by the late W. W. Near, Esq., of Toronto.

1. Value \$100: awarded to the student who has the highest standing in French 2.



2. Value \$100: awarded to the student making the highest standing in the first year of Honours work.

#### The Ottawa B'nai B'rith Scholarship in French

Value \$100: awarded to the student making the highest standing in the second year of Honours work in French.

#### Sir Wilfrid Laurier Memorial Scholarship

Value \$80. Founded by the Ontario Women's Liberal Association to perpetuate the memory of Sir Wilfrid Laurier. Awarded for proficiency in French conversation. Candidates must be Canadian-born English-speaking students, sons or daughters of a British subject by birth or naturalization, not of French parentage and resident in Ontario. The examination is held in March of each year.

See also the Edgar Forrester Scholarship in Oral French, \$20, page 96.

### DEPARTMENT OF GERMAN

In any year in which one or more of these scholarships cannot be awarded under the following conditions, the Department may make a special recommendation to the Faculty.

#### W. W. Near Scholarship in German

Founded by the late W. W. Near, Esq., of Toronto.

1. Value \$50: awarded to the student who obtains the highest standing in German 2.

2. Value \$50: awarded to the student who obtains the highest standing in German 10.

#### Susan Near Scholarship in German

Founded by the late Susan Near of Toronto.

Value \$50: awarded to the student who obtains the highest standing in any full course, or two half-courses, in Honours German other than German 10.

### DEPARTMENT OF HEBREW

#### The Harry Abramsky Scholarship in Hebrew

Value \$50. Awarded annually to the student who obtains the highest standing in Hebrew 1.

## Mary Fraser McLennan Prize in Hebrew

Value \$12. Founded in memory of Mary Fraser McLennan, of Lancaster, by her sons. Awarded to the student obtaining the highest standing in Hebrew 2.

## DEPARTMENT OF SPANISH

## W. W. Near Scholarships in Spanish

Founded by the late W. W. Near, Esq., of Toronto.

1. Value \$50: awarded to the student who has the highest standing in Spanish 1.
2. Value \$50: awarded to the student who has the highest standing in Spanish 6 or 10.

## Susan Near Scholarship in Spanish

Founded by the late Susan Near of Toronto.

Value \$50: awarded to the student who has the highest standing in Spanish 2 provided that that standing is Grade A.

## HISTORY AND SOCIAL SCIENCE

## DEPARTMENT OF HISTORY

## Andrew Haydon Scholarship in Colonial History

Value \$40. Founded by Senator Andrew Haydon, M.A. '93, LL.B. Awarded to the student with the highest standing in the Pass class in History 3 (The North American Area).

## Susan Near Scholarships in History

Founded by the late Susan Near of Toronto.

Two scholarships of the value of \$80 and \$70 respectively. Awarded to the students who, offering History as their major subject, obtain the highest and the second highest standing in History at the end of the first session after admission to Honours.

## Arts '09 Scholarship in History

Present value \$75. Founded by the class of 1909. Awarded annually to the Honours student in History with the highest standing in History courses taken in the penultimate year.

**Thomas M. Walsh, M.A., Memorial Prize in History**

Value \$10. Established by W. G. McNeil, B.A. '13, and J. F. C. Whalley, B.A. '13, in memory of their classmate, Thomas M. Walsh, M.A. '13. Awarded annually to the student who has the highest standing in the penultimate year of the Honours Course in History. In determining the award essays that have been prescribed during the session will be taken into account.

**DEPARTMENTS OF PHILOSOPHY AND PSYCHOLOGY****Susan Near Scholarship in Psychology**

Founded by the late Susan Near of Toronto.

Value \$100: awarded to the student taking the highest standing in Psychology 2.

**Isaac Cohen Scholarship in Philosophy**

Value \$100. This scholarship is awarded annually to a student in Philosophy on the results of the year's work in Philosophy 1.

**DEPARTMENT OF POLITICAL AND ECONOMIC SCIENCE****W. M. O. Lohead Scholarship in Economics**

Value \$40. Founded by W. M. O. Lohead, M.A. '98, Kitchener, Ontario. The scholarship will be awarded to the student taking the highest standing in the sessional examinations and classwork in Economics 4, provided he is in attendance in some faculty of the University during the following session.

**Adam Shortt Scholarship in Political Science**

Value \$40. Founded by G. W. Mason, Esq., K.C., in honour of Dr. Adam Shortt, formerly Professor of Economics. Awarded to the student taking the highest standing in Politics 2, provided he is in attendance during the following session and is registered in advanced work in the Department of Political and Economic Science.

**Chancellor C. A. Dunning Scholarship  
in Political and Economic Science and Commerce**

Value \$300. Awarded by recommendation of the Department on the basis of the first year's work in Honours (i.e., the first year after admission to Honours) to a candidate for Honours (major) in

Economics or Politics, or at the end of the second year's work to candidates for the degree of Bachelor of Commerce. The holder of this scholarship is paid \$150 in each of two succeeding years. The second payment may be withheld, on the recommendation of the Department, if the holder's progress is not satisfactory.

W. W. Near Scholarship in Political and Economic Science  
Founded by the late W. W. Near, Esq., of Toronto.

Value \$200: awarded by recommendation of the Department on the basis of the first year's work in Honours (i.e., the first year after admission to Honours) to a candidate for Honours (major) in Economics or Politics. The holder of the scholarship is paid \$100 in each of two succeeding years. The second payment may be withheld, on the recommendation of the Department, if the holder's progress is not satisfactory.

George and Mary Louise Patton Memorial Scholarship

Value \$80. Founded by the late George Patton in memory of his wife, Mary Louise Patton, and himself. Awarded by recommendation of the Department of Political and Economic Science on the basis of the first year's work in Honours, that is the first year after admission to Honours, to the candidate for Honours in Economics or Politics who makes the second highest standing.

Gowan Foundation No. I

Value \$20. Founded by the late Sir James R. Gowan, K.C.M.G. Awarded for the best essay written under examination conditions in February of each year, on one of a list of subjects prescribed by the Department of Political and Economic Science.

Gowan Foundation No. III

Value \$20 in books. Founded by the late Sir James R. Gowan, K.C.M.G. Awarded in Honours in Political Science.

Harry Abramsky Scholarship

Value \$50. Given by Harry Abramsky, Kingston, Ontario. Awarded to a final year student in the School of Commerce and Administration on the basis of standing on the previous year's work.

The Clarkson Prize in Accounting

Value \$50. The gift of Clarkson, Gordon and Company. Awarded on the recommendation of the staff of the School of Commerce and Administration to the graduating student who has taken the optional



courses in the accounting field and whose work on these courses and on the compulsory courses in the same field has been outstanding.

#### Arthur Hillmer Memorial Prize

A prize of the value of approximately \$10 in books. Established and maintained by Cameron C. Hillmer, Commerce '36, Oakville, Ontario. Awarded annually at the Spring Convocation to the final year student who, in the opinion of the Commerce staff, has done the best work in Commerce 52 (Marketing).

#### C. F. J. Finlay Memorial Prize

A prize of the value of approximately \$10 in books. Established and maintained by Cameron C. Hillmer, Commerce '36, Oakville, Ontario. Awarded annually at the Spring Convocation to the final year student who, in the opinion of the Commerce staff, has done the best work in Commerce 54 (Business Finance).

#### Sir James Dunn Scholarship in Commerce, \$1000

To be awarded on the recommendation of the Director of the School of Commerce and Administration and the Head of the Department of Political and Economic Science to a student in the School of Commerce who is qualified to enter the second year of the Course on the basis of his academic standing and aptitude for a business career. The student must maintain satisfactory standing from year to year in order to retain the scholarship. In the event of a student not doing satisfactory work, the Scholarship may revert to another student.

Payable in the second year of Course, \$400

third year of Course, \$300

fourth year of Course, \$300

#### Edwin Waterhouse Scholarship

Value \$250. Founded by Price, Waterhouse and Company.

Awarded to a student in the Course in Commerce and Administration who has completed the work of the third year, is within one year of graduation, has gained distinction in his academic work and is deserving of financial assistance. The award is conditional on the winner taking the optional accounting courses of the final year. If he fails to register for these courses at the beginning of the session following the award, the next most deserving candidate who satisfies all the conditions is given the scholarship.



The recipient is selected on the recommendation of a Committee of Award consisting of the Principal of the University, the Director of the School of Commerce and Administration, and the Registrar.

#### Industrial Relations Prize No. I

Value \$25. A prize of the value of \$25 to be awarded each year to the student making the highest standing in Commerce 50 (Industrial Organization and Management).

### MATHEMATICS AND SCIENCE

#### DEPARTMENTS OF MATHEMATICS AND PHYSICS

##### N. F. Dupuis Scholarship in Mathematics

Value \$50. This is one of three scholarships founded by the graduates of the University in honour of the late Professor N. F. Dupuis on the completion of his forty-five years' service as professor in the University. The scholarship is awarded to the student who takes the highest standing in Mathematics 1 in the April examinations.

##### E. D. Merkley Prize in Mathematics 2

A prize of the value of \$5 in books. Founded in memory of E. D. Merkley, B.A., a graduate of 1926. Awarded each year to the student obtaining the highest standing in Mathematics 2.

##### Susan Near Scholarships in Mathematics

Founded by the late Susan Near of Toronto.

Two scholarships of the value of \$60 and \$40: awarded to the students with the highest and the second highest standing in Mathematics 2, 10a, 11b taken concurrently.

Two scholarships of the value of \$60 and \$40: awarded to the students with the highest and the second highest standing in Mathematics 12a, 15b, and 13 taken concurrently.

##### William Coombs Baker Memorial Prize

A prize of the value of about \$22 in books selected from a list approved by the Department of Physics. This prize has been founded by graduates in memory of William Coombs Baker, formerly the Robert Waddell Professor of Experimental Physics at Queen's University. Awarded annually to the student making the highest standing in Physics 11.

## Day Scholarship in Physics and Mathematics

Value \$20. Founded in memory of the late Calvin Wellington Day, M.A., Lieutenant 2nd Battalion, C.E.F. Awarded to students proceeding to the Honours Course in Physics and Mathematics, the award to be based on examinations in Physics 2 and the Mathematics taken in the same year, provided that at least one full course in Mathematics other than Mathematics 1 is being taken.

## Susan Near Scholarships in Physics

Founded by the late Susan Near of Toronto.

1. Value \$50: awarded to the student who has the highest standing in Physics 2 and 11 at the end of the session in which course 11 is completed. Physics 2 need not be taken concurrently with Physics 11.

2. Value \$75: awarded to the student who has the highest standing in Physics 14a and 13b taken concurrently.

3. Value \$75: awarded to the student who has the highest standing in Physics 10a and 12b taken concurrently.

## The California Standard Company Scholarships

The California Standard Company has established three Scholarships of \$375 each for award to outstanding students in the penultimate year of the Course in Geological Sciences, Geo-physics or related Physics, Mining, Metallurgy, Chemical Engineering, Civil Engineering, Mechanical Engineering. In making the award consideration will be given not only to scholarship, potential ability for research, character and personality but also to interest in problems related to the exploration for and production of oil.

## DEPARTMENT OF BIOLOGY

## W. T. MacClement Memorial Scholarship in Biology 1

Value \$40. Given by graduates in memory of William Thomas MacClement, formerly the John Roberts Allan Professor of Biology at Queen's University. Awarded annually to the student making the highest standing in Biology 1.

## Ann Eliza Stafford Scholarship in Biology

Value \$30. Given by T. T. Bower, M.B.E., of Winnipeg, Manitoba, in memory of his mother, Ann Eliza Stafford (1847-1888) of Lyndhurst, Ontario.

Awarded annually to the student making the second highest standing in Biology 1.

W. W. Near Scholarship in Biology

Founded by the late W. W. Near, Esq., of Toronto.

Value \$200: awarded by recommendation of the Department on the basis of the first year's work in Honours in the Department (i.e., the first year after admission to Honours) to a candidate for Honours (major) in Biology. The holder of this scholarship is paid \$100 in each of two succeeding years. The second payment may be withheld, on recommendation of the Department, if the holder's progress is not satisfactory.

Gowan Foundation No. II

Value \$16. Founded by the late Sir James R. Gowan, K.C.M.G., for the best collection of Canadian Ferns and Fern Allies. In session 1952-53 only Canadian Ferns will be accepted. The plants must be good specimens, well pressed and mounted on herbarium sheets of the standard size. The collection must be delivered before December 15.

DEPARTMENT OF CHEMISTRY

William Moffat Scholarship

Value \$20. Founded by Dr. William Moffat of Utica and awarded annually to the student making the highest standing in first year Chemistry.

Dr. William H. Nichols Scholarship in Chemistry

Founded by Dr. William H. Nichols.

A scholarship of the value of \$40 awarded annually to the student obtaining the highest marks in Chemistry 2.

Susan Near Scholarships in Chemistry

Founded by the late Susan Near of Toronto.

Two scholarships of the value of \$100 and \$50 to be awarded to the students with the highest and second highest standing in any two of Chemistry 11, 12 and 13 taken concurrently, provided that the average obtained in each case on the two subjects is at least 75%.

### Solomon Lieff Prize in Physical Chemistry

Value of \$10.47 in books. Established in memory of the late Solomon Lieff, Arts '46, by Mr. and Mrs. I. Lieff and the B'nai B'rith Hillel Foundation of Queen's University. Awarded annually to the student making the highest standing in Chemistry 14.

### Chemical Institute of Canada Scholarships

Two scholarships of the value of \$25 each given by the Chemical Institute of Canada. One scholarship is awarded to the student in third year Chemical Engineering who obtains the highest standing on the work of the year and the other to the student either in third year Chemistry in the Faculty of Applied Science or in the penultimate year of the Honours Course in Chemistry in the Faculty of Arts, who obtains the highest standing on the work of his year.

### The A. C. Neish Prizes

Two Book Prizes of \$15 and \$10 have been established by the Kingston Section of the Chemical Institute of Canada as a memorial to Professor A. C. Neish, a former head of the Department of Chemistry at Queen's University and Past President of the Chemical Institute of Canada. The prizes are awarded annually to students in Chemistry or Chemical Engineering for the best essays or reports on topics in their special fields. The students presenting the best five essays are asked to give their papers before the Kingston Section of the Chemical Institute of Canada and the prize winners are selected from this group. The names of the winners are engraved on a plaque which hangs in Gordon Hall.

### Prize of the Society of Chemical Industry

Value \$25. The Society of Chemical Industry offers an annual prize of \$25 to be awarded to the undergraduate student in any branch of Chemistry who presents a paper on a chemical subject. The paper may be based on original laboratory or original plant work, critical study of plants and plant operations or chemical processes, critical study of laboratory procedures, or any other chemical subject involving originality.

Submissions must be typewritten on one side of the paper and may be of any length, but 3,000 or 4,000 words are suggested as suitable. They may be written in English or in French.



## DEPARTMENT OF GEOLOGICAL SCIENCES

## Manley B. Baker Scholarships in Geology

Founded by Agnes Moreland Baker. Two scholarships of the value of \$125 and \$75 are awarded annually to the students in the Faculty of Arts or Applied Science obtaining highest and second highest standing in the first three courses in Geology (1, 2 and 11 or 1, 2, and 12). These scholarships are open only to students proceeding in Honours Geology in Arts or in the Course in Geological Sciences in Applied Science. If two students are equal, preference will be given to the one whose need is greater.

## Susan Near Scholarship in Geology

Value \$100: awarded to the student making the highest standing in Geology 11, 12 and 14.

See also the California Standard Company Scholarships, page 77.

## GENERAL SCHOLARSHIPS

## University Scholarships

Six scholarships of the value of \$100 and eight of the value of \$75 are awarded at the close of each session to students completing first, second and third year work. (One of the \$100 scholarships is maintained by the class of 1940 and has been dedicated to one of their class members, Sidney Watson, who was killed on active service on April 3, 1941; one of the \$75 scholarships is maintained by the class of 1939.)

## The Toronto Branch of the General Alumni Association Scholarship

Value \$100. Given by the Toronto Branch of the General Alumni Association for a period of five years. Awarded under the same conditions as the University Scholarships.

## Reuben Wells Leonard Penultimate Year Scholarships

One scholarship of the value of \$300 and one of the value of \$200. Awarded at the end of the penultimate year to the students obtaining highest and second highest standing in the Faculty of Arts. The winning students must be in residence the year following the award.



### Andrina McCulloch Scholarships for Public Speaking

These scholarships are awarded annually for the promotion and encouragement of public speaking in the University. They are awarded in the following subjects:

#### Drama.

Two scholarships are awarded as a result of an audience poll at the two main productions of the Queen's Drama Guild.

#### Presentation of Thesis Material.

All graduate students are invited to deliver a ten-minute talk on their thesis subject to a panel of judges drawn from the Board of Graduate Studies. Awards are made to the two most lucid speakers.

### Arts '50 Scholarship

Given by members of the Class of Arts '50 in sincere appreciation of the benefits received while in course at Queen's University.

Value \$100: awarded annually to a student entering the final year of the Faculty of Arts who has made a personal contribution to the life of the University and who has maintained at least 66% on the work of the Course.

The Committee of Award will be made up of the Dean of the Faculty, the Registrar, the instructors of the students concerned and the retiring presidents of the Arts Society and the Levana Society. Applications should be made by March 1 on forms which may be obtained from the Registrar.

### B'nai B'rith Kingston, Bursary

Value \$50. Founded by the B'nai B'rith Lodge of Kingston. This Bursary is awarded annually to a student of promising ability but straitened circumstances. The award is made on the basis of the April examinations. Applications are received up until April 1 of each year.

### C.O.T.C. Scholarships

#### The Hayunga Scholarship

The Queen's University Contingent of the Canadian Officers' Training Corps awards a scholarship of \$150 to an officer cadet in

each of the Faculties of Arts, Medicine, and Applied Science after he has completed his first summer camp. The medical officer cadet receives the Hayunga Scholarship of \$100 and a C.O.T.C. supplement of \$50. The Contingent also awards a scholarship of \$150, and another of \$100 to the best cadet and the runner-up among those who have completed their second summer camp. Awards are made on soldierly and academic qualifications. Serving soldiers of the Canadian Army (AF) are not eligible.

#### Pipe Band Scholarship

Value \$25. Maintained by the Queen's University Pipe Band. Awarded in Session 1952-53 to the best piper among the first year students in all faculties on the basis of a piping contest.

#### Robert Bruce Scholarships

Under provisions in the will of the late Robert Bruce of Quebec the University has established a scholarship worth about \$50 in each of the Faculties of Arts, Applied Science and Medicine.

The scholarship is awarded at the end of the first year to the student who has the highest standing on the regular examinations of that year. One-third of the value of each scholarship is paid to the winner in each of the second, third and fourth years of his Course, provided that he is in attendance in the Faculty in which the award was made.

#### Robert Bruce Bursaries

The will of the late Robert Bruce of Quebec provided for a sum of about \$90 a year to be given in Bursaries "to students of promising ability but straitened circumstances".

This sum is disbursed annually to one or more students in the third or later years in any Faculty. The Registrar will receive applications up to September 1 in each year.

#### Khaki University and Y.M.C.A. Memorial Fund

This fund is part of a sum, left from the Khaki University after the First World War, which was divided among the Canadian Universities.

The interest, amounting to \$240, is used to award one or more scholarships to undergraduate students in any faculty. In awarding these scholarships the need as well as the standing of applicants is considered and preference is given to returned men, or sons or

daughters of soldiers of the First World War. Applications are received by the Registrar up to March 1.

#### University Women's Club of Kingston Bursary

Value \$150. Given annually by the University Women's Club of Kingston to assist a woman student of promising ability who is in financial difficulties. Interested candidates should make application to the Registrar by December 31.

#### Lilian Coleman Taylor Prize

Value \$60. Awarded annually to the most outstanding woman student from Leeds County registered in any faculty of Queen's University.

#### The O. M. Montgomery Memorial Fund

Established by the Aluminum Company of Canada in memory of Mr. O. M. Montgomery who graduated from Queen's University in Electrical Engineering in 1905. This fund is used to provide bursaries for worthy students in need of financial help. It is administered by a Committee consisting of the Principal, the Vice-Principal, the Registrar, and a representative of the Aluminum Company. Awards may be made in any faculty, and may be regarded as gifts at the discretion of the Committee when made to sons or daughters of employees of the Aluminum Company. Otherwise repayment is expected in one or both of the following ways:

(1) By service to the University if the beneficiary has time and is qualified for the work available. Such service shall be assistance in a department, or office, or library, or laboratory, or some other comparable employment.

(2) By return in cash of the sum granted, or of the part not worked out. In such case the award is regarded as a loan without interest, payable at some convenient time to be agreed upon.

#### Ottawa Ladies' College Scholarships

"Ottawa Ladies' College was incorporated by Statute of the Province of Ontario in 1869 at the request of citizens of Ottawa 'for the purpose of establishing and conducting a seminary of learning of a collegiate character for the education of female youth'. Its first President was E. B. Eddy and Secretary, Rev. William Moore. Its building was expropriated for war purposes in 1942 and it then ceased to function for the specific purpose for which it was incorporated. In order that it might use its assets for wider educational

purposes its Act of incorporation was amended in 1948 and it has now transferred its funds in trust to Carleton College, Ottawa, and Queen's University, Kingston."

(a) Four scholarships of \$100 each to be awarded each year to Protestant lady students from the Ottawa Collegiate Institutes or Technical Schools without restriction as to Course or the year of attendance at Queen's.

(b) \$500 to be used annually to pay one or more Protestant students from Ottawa for assistance to the teaching staff at Queen's University.

#### Lorne Greene Fellowship in Radio Arts

This fellowship has been given by Lorne Greene, Arts 1937, to encourage students to enter the field of radio broadcasting. It is awarded annually to the graduating student in the Faculty of Arts who best qualifies for admission to the Academy of Radio Arts in Toronto. The winner of the fellowship receives free tuition at the Academy.

#### Social Engineering Prize

Value \$50. Founded by A. E. MacRae of Ottawa. Awarded annually under the following conditions as stated by the donor.

The object of this prize is to promote on the part of the individual the practice of factually appraising his every act from the point of view of others concerned so that he may make it easiest for them to co-operate in achieving a desired objective. It is based on the idea that maximum social progress primarily demands of education the production in individuals of capacity to lead others in the doing of things which, in the long view, are for the continuing good of all. A keen sense of responsibility for the common good, as opposed to the mere temporary benefit of a particular agency, is essential in efficient social leadership.

It is presented annually to the student in attendance at Queen's University who, prior to the beginning of his or her graduating year has developed and exhibited the greatest capacity in leading the student body, or any portion of it, in accomplishing purposes which are considered good by the majority of the student body.

The recipient shall be selected by a committee consisting of the presidents of the faculty societies and the Levana Society and the Principal of the University or his nominee.



### George Taylor and Lilian Coleman Taylor Bursary

A limited amount of money from the George Taylor and Lilian Coleman Taylor Fund is available annually for competent but needy students from Leeds County registered in any Faculty of the University. Applications for grants from this fund should be made through the Registrar.

### Welch Scholarship

Value \$100. Founded by Frederick Welch of Kingston. Awarded in the Faculty of Arts and open for competition only to the sons and daughters of non-commissioned officers and men who served overseas in the Great War, and of mechanics and labourers, which students shall at the time be bona fide residents of the City of Kingston, preference being given to the children of soldiers. Application for this scholarship must be made to the Registrar not later than March 1 and must give evidence of eligibility in accordance with the terms of the will. The scholarship is awarded on the basis of the April examinations.

### Atkinson Foundation Scholarships

Scholarships from moneys given by the Atkinson Foundation will be awarded in session 1952-53 on the basis of merit and need. In making the awards the Scholarship Committee will take into account the sincerity and future promise of the candidate.

### Reuben Wells Leonard Special Scholarships

Special Reuben Wells Leonard Scholarships for merit and need are available for students of promising ability but straitened circumstances. The awards are made on a loan or service basis.

### St. Andrews Exchange

An exchange between the University of St. Andrews in Scotland and Queen's University in Kingston is arranged each year. Under this arrangement the University of St. Andrews gives exemption from fees and room and board to a student appointed by Queen's University and in return Queen's University gives free tuition and provides board and lodging for a student from St. Andrews. In addition, Queen's University gives a cash award of \$200 towards the travelling expenses of the student appointed to St. Andrews and the University of St. Andrews gives £50 to the student coming to Queen's.

Applications for the exchange scholarship should be submitted to the Registrar of Queen's University by March 1 of the year of award.



### Exchange Plan for Undergraduates of Canadian Universities

The object of the Exchange Plan is to permit specially selected students to take a year of work at a university in another section of the country, provided that such students undertake to return the following year to their own university. Students accepted under the exchange plan will be permitted to take a full year's work at the desired university with exemption from tuition.

Applications for an Exchange Scholarship must be in the hands of the Registrar not later than March 1.

### III. GRADUATE FELLOWSHIPS

#### (i) Travelling Fellowships.

(a) The R. Samuel McLaughlin Travelling Fellowship of the value of \$1500.

Awarded annually to a graduate of the Faculty of Arts or Applied Science of Queen's University who holds the Master's degree and who has maintained distinguished standing throughout his Course.

The candidate must submit and have approved a plan of study, and must present a report on his year's work within twelve months of his appointment.

Application must be made by letter to the Registrar not later than March 1.

(b) The Reuben Wells Leonard Travelling Fellowship of the value of \$245.

This fellowship is awarded annually to a student intending to do postgraduate work at a University within the Commonwealth.

Application must be made by letter to the Registrar not later than March 1.

#### (ii) Resident Fellowships.

The R. Samuel McLaughlin Resident Fellowships

(a) Two Resident Fellowships of \$1200 each; open to men and women students who have taken the Master's degree at Queen's University or an equivalent degree elsewhere and who wish to proceed to advanced study in any field except Medicine.

A student appointed to a fellowship is expected to tutor or demonstrate for a period not exceeding six hours per week. If he prefers not to give this service, but to devote his full time to study, his fellowship will be \$350 less in value.

Application must be made by letter to the Registrar not later than March 1.

(b) Eight Resident Fellowships ranging in value from \$900 to \$1100 are open to students in Arts and Applied Science who have taken the Bachelor's degree with Honours at Queen's University or an equivalent degree elsewhere and who wish to do graduate work in the Humanities, Social Sciences, Mathematics, Biological Sciences, Geological Sciences, Chemistry, Physics and Engineering.

A student appointed to a fellowship is expected to tutor or demonstrate for a period not exceeding six hours per week. If he prefers not to give this service, but to devote his full time to study, his fellowship will be \$350 less in value. In determining the exact value of a Fellowship or Scholarship the committee will take into account the quality of the candidate's past work and award within the limits indicated above.

Application must be made by letter to the Registrar not later than March 1.

#### Reuben Wells Leonard Resident Fellowships

Under the will of the late Reuben Wells Leonard provision was made for the following Fellowships:

Two fellowships of the value of \$750 and one of \$500, or four fellowships of the value of \$500 to be awarded annually to graduates of Queen's University "who are willing and qualified to undertake independent research work in the interests of higher culture". These fellowships are tenable only by students in attendance at Queen's.

Application must be made by letter to the Registrar not later than March 1.

#### (iii) Departmental Fellowships.

A candidate of exceptional ability qualifying for a Departmental Fellowship, valued at less than \$750 may, at the discretion of the Scholarship Committee, be given an additional award of from \$250-\$400 to make up a total of not more than \$750.

#### FELLOWSHIPS IN CHEMISTRY

##### Milton Hersey Fellowship in Chemistry

This fellowship, of the annual value of \$400, has been endowed by Milton L. Hersey, M.Sc., LL.D., of Montreal. It is open to graduates of all universities and technical colleges.

The holder of this fellowship shall carry on research work for the whole session and embody the results in a thesis. The research may take the form either of independent investigation or of assistance in an investigation carried on by the department. The fellow may be required to undertake tutorial work not to exceed six hours a week.

Applications for fellowships are received by the Registrar up to March 1. If no appointment is made by that date, further applications are received up to September 1.

#### William Neish Fellowship in Chemistry

This Fellowship of an annual value of \$400 has been endowed by Ada E. Neish and Laura Neish Black of Kingston. It is open to graduate students in Chemistry from Queen's or other universities.

The holder of this fellowship shall carry on research work at Queen's for the whole session under the direction of some member of the Department of Chemistry, and shall embody the results in a thesis. The fellow shall be required to give laboratory instruction or its equivalent not to exceed nine hours a week.

#### The C.I.L. Fellowship in Chemistry and Chemical Engineering

Value \$1200. Founded by the Canadian Industries Limited for research in Chemistry or Chemical Engineering. This is a resident fellowship open to graduates of Queen's or other universities. Applications are received by the Registrar up to March 1.

#### Shell Oil Fellowship

The Shell Oil Company of Canada has established a fellowship of the value of \$900 plus tuition, for graduate work in Chemistry, Chemical Engineering, Mechanical Engineering, Geology, Physics, Geophysics.

Applications must be submitted by March 1 each year.

#### FELLOWSHIP IN COMMERCE

The Maritime Provinces Trade Relations Fellowship, valued at \$320

This Fellowship has been set up by the Maritime Provinces Trade Relations Committee for award to a student who is interested in proceeding to advanced graduate work in Business Administration, Commerce or Economics. The student must be a graduate of a University in Nova Scotia, Prince Edward Island or New Brunswick and one of his parents must have been born in one of these provinces.

The Fellowship will be awarded in rotation by Queen's University, the University of Toronto and the University of Western Ontario. Queen's University will make an award in 1952. In selecting the candidate, some attention will be given to need.

Application must be made to the Registrar by March 1.

#### SCHOLARSHIPS IN GEOLOGY

##### The E. L. Bruce Memorial Scholarship

This scholarship has been established in memory of Professor E. L. Bruce, former head of the Department of Geology and Chairman of the Board of Graduate Studies.

Awarded annually to a student in the Department of Geological Sciences who has already completed a year of graduate work at Queen's University. The recipient shall be known as the E. L. Bruce Research Scholar and shall be required to do at least two hours' work per week for the Department of Geological Sciences, the type of work to be determined by the Head of the Department and to be preferably of an instructional nature.

The Committee of Award shall be made up of the Head of the Department of Geological Sciences who shall be Chairman, one other member of the Department to be named by the Head, the Treasurer of the University and Dr. F. J. Alcock of the National Museum of Canada. The Principal of the University shall be an ex-officio member of the Committee.

##### The California Standard Company Fellowship

The California Standard Company has established a Fellowship of \$750 which will be awarded annually to an outstanding graduate of Queen's University in Geological Sciences, Geophysics or related Physics, Mining, Metallurgy, Chemical Engineering, Civil Engineering, Mechanical Engineering. In making the awards consideration will be given not only to scholarship, potential ability for research, character and personality but also to interest in problems relating to the exploration for and production of oil.

##### J. B. Tyrrell Scholarship in Economic Geology

Founded by J. B. Tyrrell, LL.D., of Toronto.

Value \$500. This scholarship is awarded to a graduate student who is working in the field of Economic Geology.

Applications must be sent to the Registrar not later than March 1 of each year.



## The Major James H. Rattray, M.C., Scholarship

Value \$100. Founded by Major James H. Rattray, M.C. Open to students in either the Faculty of Arts or the Faculty of Applied Science; ordinarily awarded on the basis of standing in Economic Geology (including Geology of Canada), a subject of the fourth year, and tenable by a student registered for graduate work in the following year. In any year in which the scholarship cannot be used, it may be awarded at the discretion of the Scholarship Committee either as a prize or as a general proficiency scholarship at the end of the third year, and held by a student whose programme will include Economic Geology in the following year. In determining the award, the Scholarship Committee take into account aptitude as well as academic standing.

## FELLOWSHIPS IN HISTORY

## Sir James Aikins Fellowship in Canadian History

This fellowship of the annual value of \$400 was created through the generosity of Sir James Aikins, K.C., LL.D., of Winnipeg, who gave an amount creating an annual revenue of \$200. This was supplemented by an equal sum contributed by Queen's University. It is awarded on the basis of distinguished work in the advanced Honours courses in Canadian History, or such other courses as the Professor of Canadian and Colonial History shall determine.

The fellowship is tenable only by students who return to the University for further work in Canadian History and is subject to the same conditions regarding tutorial work as the R. Samuel McLaughlin Resident Fellowships.

## Western Ontario Graduates Fellowship in History

This fellowship of the annual value of \$320 was created through the generous contributions of graduates of the University in western Ontario of an amount creating an annual revenue of \$160, which was supplemented by an equal sum contributed by Queen's University. It was established for the purpose of encouraging research in History and of providing junior assistants in the Department of History. It is awarded within the discretion of that Department to an advanced student of satisfactory academic standing in attendance at the University, and is subject to the same conditions regarding tutorial work as the R. Samuel McLaughlin Resident Fellowships.



## FELLOWSHIP IN INDUSTRIAL RELATIONS

## The Clarence J. Hicks Memorial Fellowship in Industrial Relations

Value \$600, tenable at Queen's University. Founded by friends and admirers of the late Clarence J. Hicks, Chairman of the Board of Trustees of Industrial Relations Counselors, Inc., New York City, and pioneer in the field of Industrial Relations, through whose leadership and assistance the Department of Industrial Relations was established at Queen's in 1937.

The fellowship is awarded annually. If in any year no qualified candidate is available, the income for that year will be accumulated for the purpose of granting an additional or larger fellowship in subsequent years.

The fellowship is available for study of, or research work in, industrial relations to graduates of Canadian universities who are nominated, within not more than five years after graduation (exclusive of any period of active service in His Majesty's Armed Forces or in the armed forces of any ally of the Dominion of Canada), by the Director of the Department of Industrial Relations of Queen's University. Graduate work in Industrial Relations requires as a prerequisite specialized undergraduate work in economics or commerce.

The award will be made on the basis of intellectual achievement, personality, participation in student activities, standing among fellow students and promise of success in industrial relations work. Need for financial assistance will be taken into account only as between candidates otherwise of equal merit.

## FELLOWSHIP IN PHILOSOPHY

## George MacBeth Milligan Fellowship in Philosophy

This fellowship of the annual value of \$400, has been endowed by George MacBeth Milligan of Toronto. It is awarded to a graduate who is qualified to carry on independent research work in Philosophy.

The fellow appointed shall carry on research work at Queen's University for the whole session and shall embody the results in a thesis. Such research may take the form of assistance in an investigation. Tutorial or other help may be required, under the same conditions as for the R. Samuel McLaughlin Resident Fellowships.

The fellowship may be awarded to a qualified graduate of another university.

## FELLOWSHIPS IN PHYSICS

See the Shell Oil Fellowship, \$750 (page 88) and the California Standard Company Fellowship, \$750 (page 89).

## IV. FELLOWSHIPS NOT CONTROLLED BY THE UNIVERSITY

## A. THE MARTY MEMORIAL SCHOLARSHIP

This scholarship in memory of Dr. Aletta Marty, valued at not less than \$1000, is offered by the Queen's University Alumnae Association. Any woman graduate of Queen's University with a Master's degree may hold this scholarship, which is ordinarily awarded for a year's graduate work overseas. A committee chosen by the Alumnae Association makes the award.

The scholarship may be awarded to the same woman for a second year. The committee is authorized to withhold the award in any year for financial or academic reasons.

Applications should reach the Registrar not later than January 1 each year. Candidates must have the Master's degree when they hold the scholarship but not necessarily when they apply for it. Further information may be obtained from the Registrar's Office.

This scholarship has been awarded to the following graduates of Queen's University: 1937, Winifred (Rutledge) Peterson; 1938, Jeanne (LeCaine) Agnew; 1939, Elise M. Berry; 1940, Anne H. (Sedgewick) Carver; 1941, Eleanor (Clarke) Hay; 1942, Joyce Hemlow; 1943, Kathleen Butcher; 1944, Ellen Thibaudeau; 1945, Reta E. Anderson; 1946, Claire (Curtis) Tanner; 1947, Barbara Rooke; 1948, honour to Audrey D. Freeman, award to Arliss Denyes; 1949, Pauline Jewett; 1950, Marion Robins; 1951, Thelma-Anne McLeod; 1952, honour to Doreen Maxwell.

## B. THE RHODES SCHOLARSHIP

1. General Regulations: A Rhodes Scholarship is tenable at the University of Oxford and may be held for three years. Since, however, the majority of Rhodes Scholars obtain standing which enables them to take a degree in two years, appointments are made for two years in the first instance, and a Rhodes Scholar who may wish to remain for a third year will be expected to present a definite plan of study for that period satisfactory to his College and to the Rhodes Trustees.

Rhodes Scholars may be allowed, if the conditions are approved by their own College and by the Oxford Secretary to the Rhodes

Trustees, either to postpone their third year, returning to Oxford for it after a period of work in their own countries, or they may spend their third year in postgraduate work at any university of Great Britain, and in special cases at any university on the continent of Europe, the overseas dominions, or in the United States, but not in the country of their origin.

The stipend of a Rhodes Scholar is fixed at £400 per year. At most Colleges, and for most men, this sum is not sufficient to meet a Rhodes Scholar's necessary expenses for term-time and vacations, and scholars who can afford to supplement it by £50 per year from their own resources will find it advantageous to do so.

2. Conditions of Eligibility: A candidate to be eligible must:

(1) Be a British subject, with at least five years' domicile in Canada, and unmarried. He must have passed his nineteenth year, but not have passed his twenty-fifth birthday on October 1 of the year for which he is elected.

(2) Have reached such a stage in his course at one of the universities in Canada that he will have completed at least two years at the university in question by October 1 of the year for which he is elected.

Candidates may apply either for the province in which they have their ordinary private domicile, home or residence, or for any province in which they have received at least two years of their college education before applying.

In that section of the Will in which he defined the general type of scholar he desired, Mr. Rhodes wrote as follows:

"My desire being that the students who shall be elected to the Scholarships shall not be merely bookworms, I direct that in the election of a student to a Scholarship regard shall be had to:

1. his literary and scholastic attainments;
2. his fondness for and success in manly outdoor sports such as cricket, football and the like;
3. his qualities of manhood, truth, courage, devotion to duty, sympathy for and protection of the weak, kindness, unselfishness and fellowship, and
4. his exhibitions during school days of moral force of character and of instincts to lead and to take an interest in his schoolmates for those latter attributes will be likely in after life to guide him to esteem the performance of public duty his highest aim."

Full particulars may be obtained from D. R. Michener, 372 Bay St., Toronto, Secretary of the Selection Committee for the Province of Ontario. Two Scholarships may be awarded annually in the provinces of Quebec and Ontario if qualified candidates appear.

Each candidate for a Scholarship is required to make application to the Secretary of the Committee of Selection of the province in which he wishes to compete, not later than November 10. Application forms may be obtained from the Registrar's Office.

The following graduates of Queen's University have been awarded Rhodes Scholarships: 1905, J. M. Macdonnell; 1906, A. G. Cameron; 1907, N. S. Macdonnell; 1911, S. Scott; 1912, H. S. Smith; 1914, A. G. Cumming; 1919, H. R. MacCallum; 1920, K. E. Taylor; 1922, A. D. Winspear; 1925, L. F. Kindle; 1926, D. A. Skelton; 1936, J. G. Davoud; 1937, G. M. Brown; 1938, G. P. Grant; 1941, G. S. Bowell, R. S. Rettie; 1946, F. G. Hooton; 1948, Michael Howarth.

This Scholarship is not controlled by the University.

#### C. CANADIAN FEDERATION OF UNIVERSITY WOMEN SCHOLARSHIPS

The Canadian Federation of University Women offers the following scholarships:

I. Senior: Value \$1500, available for study or research work, open to any woman holding a degree from a Canadian university, who is not more than 35 years of age at the time of award. In general, preference will be given to those candidates who have completed one or more years of graduate study and have a definite course of study or research in view.

II. Junior: Value \$1000, open to any woman holding a degree from a Canadian university, who is not more than 25 years of age at the time of award. Preference will be given to students who have studied in only one university and who desire to continue their studies in another. Constance Bennett was awarded this fellowship in 1950.

III. Professional: Value \$1000, available for study in a professional school, open to any woman holding a degree from a Canadian university, who is not more than 35 years of age at the time of the award.

The awards are based on evidence of character, intellectual achievement and promise of success in the subject to which the candidate is devoting herself.

The proposed place and plan of study or research must be approved by the Scholarship Committee.



Application blanks and further information may be obtained from the Convener of the Scholarship Committee, Dr. Doris Saunders, University of Manitoba, Winnipeg, Manitoba. Applications and recommendations must be received not later than February 1.

The following graduates of Queen's University have been awarded the Senior Federation Scholarship:

1930-31, Mary White; 1935-36, Marie (Hearne) Creech; 1940-41, Jeanne (LeCaine) Agnew; 1941-42, Anne (Sedgewick) Carver; 1943-44, Joyce Hemlow; 1944-45, Kathleen E. Butcher; 1946-47, Barbara M. St. G. Craig; 1947-48, honour to Barbara Rooke; 1948-49, Carol Hopkins; 1952, Doreen Maxwell.

#### D. DAUGHTERS OF THE EMPIRE POSTGRADUATE FELLOWSHIP (OVERSEAS)

As part of a War Memorial, the Imperial Order Daughters of the Empire offers annually in each province in Canada a scholarship for one year's postgraduate study in Great Britain. The value of the scholarship is \$1500 a year.

The conditions under which this scholarship is awarded are as follows:

1. Candidates may be men or women. They must be British subjects with at least five years' residence in Canada, and unmarried. Each candidate must hold a degree from a recognized university or degree-granting college in Canada, and must have done or be doing postgraduate work.

2. In each province a Committee of Selection will award the scholarship. Other things being equal, preference will be given the returned man, his sister, brother, son or daughter. The Committee of Selection will consider not only academic attainments and promise, but also personal character and physical fitness.

3. Applications for this scholarship should be sent before October 15, 1952, to Mrs. O. M. Martin, Provincial Educational Secretary, I.O.D.E., 182 Lowther Avenue, Toronto, Ontario, who will provide additional information about the scholarship.

The following graduates of Queen's University have been awarded Daughters of the Empire Overseas Scholarships:

1921-22, Watson Kirkconnell; 1923-24, Hartly Munro Thomas; 1936-37, Henry Stanley Ferns; 1938-39 and 1939-40, Thomas John Allan; 1948-49 and 1949-50, David McQueen.

Detailed information about other fellowships may be found in the Calendar of Graduate Studies, a copy of which will be sent on request.



## V. PRIZES

## The Alexander MacLachlan Peace Prize

The Alexander MacLachlan Peace Prize has been established by the MacLachlan family in memory of Alexander MacLachlan, former President of International College, Smyrna, who throughout his life worked for a better understanding among nations.

Value \$30. Awarded annually to the student making the highest standing in History 27 (Contemporary Europe).

## Prince of Wales Prize

A prize of the value of \$32 in books. Founded in 1860 by H.R.H. the Prince of Wales. Awarded to the graduating student in the Faculty of Arts who is adjudged to have the best academic record at Queen's.

## The M. C. Cameron Prize

Value \$40. Founded by the late M. C. Cameron, M.P., Goderich. Awarded to the best Gaelic scholar, reader or speaker, provided that he does not take less than 50% of the total number of marks in the competitive examination. Application for examination should be submitted to the Registrar before January 15 in each year. Work prescribed: any 600 lines of Ossian's *Fingal*, or an equivalent amount of any other Gaelic literature selected by the candidate; Blackie's *Language and Literature of the Scottish Highlands*, Gaelic Grammar, translation at sight of Gaelic into English and English into Gaelic.

## Senator Davies Poetry Prize

Value \$500. Given by Senator W. Rupert Davies of Kingston for a period of ten years. Awarded for the best English poem of not more than fifty lines.

Candidates must submit their poems by February 1 of the year of award. Three typewritten copies of each poem must be submitted. They must be enclosed in one envelope addressed to the Registrar and marked on the outside "Senator Davies Poetry Prize". The writer's name must not be given but each copy must bear a motto instead of the author's name. Another sealed envelope inscribed with the same motto should be included containing (a) the author's name and (b) a signed declaration that the poem is the author's own original unaided composition. A competitor may submit more than one but not more than three poems but if more than one is submitted each poem must be sent in enclosed in a different envelope with a different motto for each entry.

The subject for the competition in 1952-53 is "Airborne".

The competition is open to all resident undergraduates of the Faculty of Arts who are registered as full time students on February 1 of the year of the award.

#### Whig-Standard Essay Prize

Value \$500. Given by Senator W. Rupert Davies of Kingston for a period of ten years. Awarded for the best English essay of not fewer than 3,000 or more than 5,000 words.

Candidates must submit their essays by February 1 of the year of award. Three typewritten copies of each essay must be sent in. They must be enclosed in one envelope addressed to the Registrar and marked on the outside "Whig-Standard Essay Prize". The writer's name must not be given but each copy must bear a motto instead of the author's name. Another sealed envelope inscribed with the same motto should be included containing (a) the author's name and (b) a signed declaration that the essay is his own original unaided composition.

The topic for the competition in 1952-53 is "The Two Elizabeths".

The competition is open to all resident undergraduates of the Faculty of Arts who are registered as full time students on February 1 of the year of award.

### SUMMER SCHOOL PRIZES

#### Curtis Memorial Foundation

Value about \$56. Founded in memory of the late J. T. Curtis of Ottawa. Awarded in October to a graduate of that year (April or September), who has completed the degree Course by extramural and Summer School work. The award is made by a special committee on the basis of scholastic ability, interest in athletics, and service to the Summer School.

#### Edgar Forrester Scholarship in Oral French

Founded by the late Edgar Forrester, Esq.

Value \$20. Awarded to the student making the highest standing on the Summer School examination in Oral French.

#### Matheson Prize

Founded by the Queen's University Summer School Association.

Value \$25. Awarded to the Summer School student standing highest in the August examination in Mathematics 2. Founded

by the Queen's University Summer School Association in honour of the late Dean John Matheson, one time supervisor of extramural work and from 1939 to 1943 Director of the Summer School, an ardent believer in extension courses, friend and counsellor of many generations of students.

#### The W. T. MacClement Prizes

Founded by the Queen's University Summer School Association.

Four prizes of the value of \$25 each. The Queen's University Summer School Association has established in memory of Dr. W. T. MacClement, the first Director of the Summer School, four prizes to be awarded on the results of the August examinations in English 2, Philosophy 1, History 3 and Biology 1 to the Summer School students who stand first in these courses.

#### McNeill Prize

Value \$25. Awarded to the Summer School student standing highest in the Fall examination in the English pass course numbered beyond English 2. Founded by the Queen's University Summer School Association to honour Dr. W. E. McNeill, former Vice-Principal and Treasurer, a wise friend and counsellor to Summer School Executives.

#### Wallace Prize

Value \$25. Awarded to the Summer School student standing highest in the August examination in Geology 1. Founded by the Queen's University Summer School Association in honour of Dr. Robert C. Wallace, Principal of Queen's University from 1936 to 1951.

### VI. MEDALS

A medal is awarded annually by the University to the candidate in each major subject who has made the highest standing on the whole of his Honours work in that subject, provided that such standing is Class I.

## GENERAL REGULATIONS

All inquiries regarding regulations should be addressed to the Registrar.

Changes in regulations become effective immediately.

### SPECIAL STUDENTS

1. Special students are those who do not intend to proceed to a degree. Such students may be admitted on satisfying the Faculty of their ability to profit by the courses to which they seek admission.

2. Special students under twenty-one at the opening of the session are subject to all the regulations affecting regular students and to the following special regulations:

(i) They are not granted admission for more than one session though they may be readmitted to a succeeding session on a new application.

(ii) They are not allowed any supplemental examinations but are required to withdraw from the University immediately if they fail to satisfy the Faculty at the regular mid-year or April examinations.

(iii) Examinations passed by special students carry no credit towards Matriculation or towards a degree.

(iv) Attendance as a special student does not count as part of the attendance required for a degree.

### REGULATIONS REGARDING COURSES

#### Determination of Standing

3. Students are expected to be present at all lectures and laboratory periods in their courses and to hand in all essays and class exercises when due. If laboratory work, essays, exercises and reports are not done during the session to the satisfaction of the departments concerned, credit will be withheld until these requirements are met.

4. The December and April marks are determined not merely on the results of the examinations but also on the work of the whole term or session, including essays, exercises and class tests.

5. The Faculty may, at any time, either during the term or after the close of the term, require any student to withdraw whose conduct, attendance, work, or progress is deemed unsatisfactory.



## Number of Courses in a Year

6. Students are given credit for the full work of the year if they pass each of five courses with 50%. Students whose standing is as low as 45% in one subject are considered to have full credit for the year if they make at least 50% on each of the other subjects and an average of 60% on the whole.

7. No student is allowed to take more than five lecture courses in the academic year except as provided below.

(a) Students are permitted to take by extramural or extramural and Summer School work one back course during the summer following a winter session in which they have passed in five courses. This regulation is not open to a student who has failed a year.

(b) Students lacking only six courses for degree may take these courses in the final regular winter session with the approval of the Dean of the Faculty.

8. Intramural students, unless excused for some special reason, must take five courses in each of the first and second years. In no case are such students allowed to take fewer than three courses in the first or second year. In exceptional circumstances, they may, with the consent of the Board of Studies, take three or four courses in the winter session and the rest in the summer provided that they attend the Summer School.

9. Students who, without special permission, drop a course, are considered to have failed in that course.

## Preparatory Courses

10. Students with full Matriculation who desire to begin work in Greek, German or Spanish may count course A in one or more of these subjects towards a Pass degree. They may count course A in one only of these subjects as a free option towards an Honours degree.

Unmatriculated students who use an A course in a language to remove an entrance condition may not count this course as a credit towards a degree. (See Admission by Special Regulation, page 52.)

11. Courses A and 1 may not be substituted for courses 1 and 2 where the latter are definitely prescribed.



## Failures and Low Grades

## Loss of Year

12. (a) Students who at the final examinations fail in more than two courses are considered to have lost their year and may not write supplemental examinations. Students, who at the beginning of the next academic year lack credit on more than one course or two half-courses of the previous year's work, are considered to have lost their year.

(b) Students who have lost their year may retain credit only in those courses on which they have obtained at least 62%.

## Withdrawal

13. (a) Students who fail in four or five courses at the final examinations are required to withdraw from the Faculty of Arts.

(b) Students who twice lose a year are required to withdraw from the Faculty of Arts.

14. Students who have been required to withdraw from the Faculty of Arts, may be re-admitted in some subsequent session only if they give convincing evidence that they can profit from University work.

## REGULATIONS REGARDING EXAMINATIONS

## Mid-Term Examinations

15. One hour examinations in regular class periods may be held by any instructor whenever he thinks advisable.

## Mid-Year Examinations

16. Midwinter examinations in all whole courses are held during the last week before the Christmas holidays. In these courses credit not exceeding fifty per cent of the final marks may be assigned to the work of the first term. The attention of students is called to Regulation 4. Final examinations in half-courses of the first term are held in January (see page 6).

## April Examinations

17. Final examinations in all whole courses, half-courses of the second term and reading courses are held in April. Intramurai students are expected to take examinations in all the lecture courses

in which they are registered in the second term. In special circumstances and on the recommendation of the professor concerned they may be given permission to postpone until August examinations in courses numbered under 10. They may not postpone examinations in Honours courses.

Examination in the first and second reading courses in all subjects are held in both April and September.

The attention of students is specially drawn to Regulations 4 and 12.

#### Admission to Examinations

(See also Regulations 17 and 21)

18. Ordinarily students are not permitted to take examinations unless they have registered on the prescribed date within the academic year in which they present themselves, but graduates not in attendance who wish to take examinations merely to raise their standing in courses already passed, may delay their registration until February 15. (See Regulation 23).

19. No candidate is admitted to the examination hall later than thirty minutes after the beginning of the examination.

20. No candidate is permitted to take any books or papers into the examination hall except by express direction of the examiner.

#### Supplemental Examinations

21. Supplemental examinations are held in August in all Pass courses and in the first course in Honours but no supplementals are given beyond the first course in Honours in a major or minor subject for the Honours B.A. degree. Supplemental papers are set in all subjects offered at the Summer School and in reading courses 1 and 2 for those who do this reading during the summer. Candidates must apply to the Registrar by June 15 for permission to write on the courses in which they wish to be examined. The application must be on printed forms supplied for the purpose and must be accompanied by the fee of \$6 for each whole course, \$3 for each half-course.

22. (a) A student who fails the final examination in any course may write a supplemental at the next regular examination period provided that a supplemental is offered in the subject concerned and that the student has not lost the year.

(b) Students who fail in any course may not come up again for examination in that course except for a supplemental examina-

tion as provided in section (a) above without re-registering in the course and repeating the full work.

23. Students who have passed the examination in a course may rewrite for higher standing. This privilege is extended to the third examination period after the first time of writing. Ex-service men and women affected adversely by this regulation may be given consideration by the Board of Studies who will recommend action to the Faculty of Arts.

### Special Examinations

24. Students who for any reason fail to take an examination on the appointed date may be required to take a special examination. The fee is five dollars for one special examination; ten dollars for two or more examinations.

### Rereading of Examination Papers

25. Examination papers of candidates failing by only a few marks are reread with care and there is little likelihood of the original mark being changed by a further rereading. Students who wish to have a paper reread by the instructor and an independent examiner must make application within two months of the examination and pay a fee of \$10. If as a result of a rereading a mark is raised to a pass, the fee is refunded in full to the student.

### Determination of Standing

26. In determining a student's standing at a sessional examination the Departments take into account the entire class record. See Regulation 4.

### Standing

27. (a) In Pass courses numbered under 10, Grade A - 75%; Grade B - 62% to 74%; Grade C - 50% to 61%.

(b) In Honours courses numbered 10 or over and Reading courses, Grade A - 75%; Grade B - 66% to 74%; Grade C - 55% to 65%; Grade D - 50% to 54%.

Standing of 62% or more on a course numbered 10 or over counts as a B grade towards a Pass degree. Grade D standing on an Honours course counts towards a Pass degree but carries no credit towards an Honours degree.

# COURSES OF STUDY LEADING TO DEGREES

## GENERAL EXPLANATIONS

### Pass and Honours Courses

The word "Course," when printed with an initial capital, is used to indicate a programme of work leading to a degree or certificate.

A candidate for the degree of Bachelor of Arts may take a Pass Course or an Honours Course. The latter requires greater specialization and higher standards in the work of the two main subjects. Details are given below under REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS.

### Courses and Half-Courses

The word "course," printed with an initial small letter, indicates a unit of work occupying, as a rule, three hours a week throughout the session. A "half-course," on the other hand, usually occupies only one term, though occasionally it may run through the session.

Two half-courses are equivalent to a whole course, and when the amount of work to be done is defined in courses, it is to be understood that an equivalent in courses and half-courses may be offered.

### Numbering of Courses and Half-Courses

Preparatory courses in the languages are designated by the letter A. (See GENERAL REGULATIONS.) Other courses are numbered with Arabic numerals (Latin 1, Greek 2). Half-courses have in addition to the numeral the letter *a* or *b*, according as they are offered in the first or second term.

The fundamental courses in each subject are ordinarily numbered 1 and 2 (Philosophy 1, Politics 2) and must be taken by all proceeding to advanced work in the subject. Other courses numbered under 10 are for Pass students only. Courses numbered 10 and upward are Honours courses, though in most departments they are open to Pass students provided that prerequisites have been completed satisfactorily.

## SYNOPSIS OF COURSES

The following Courses of undergraduate study are offered in the Faculty of Arts:



Pass Courses leading to the degree of B.A.

Honours Courses leading to the degree of B.A. with Honours and admission to the course of study leading to the Interim High School Assistant's Certificate, Type A

Combined Course in Arts and Theology

Combined Course in Arts and Physical and Health Education.

Candidates are subject to changes in Regulations or Courses made after their first registration unless in the judgment of the Board of Studies undue hardship is involved.

All inquiries regarding Regulations should be addressed to the Registrar.

#### REQUIREMENTS FOR THE PASS B.A. DEGREE

Candidates entering the Pass Course with Grade XIII standing in five subjects (see Entrance Requirements, p. 47) are required to take fifteen courses for the Pass degree. Those entering with only four subjects of Grade XIII must take sixteen courses.

Ex-service men and women entering on the special Junior Matriculation (Ontario Grade XII) approved by the National Conference of Canadian Universities (p. 50) shall offer a total of twenty courses which may include as many as five Senior Matriculation (Grade XIII) subjects for which they may have credit.

The Pass Course provides for distribution and concentration of work as follows:

A. Compulsory general courses, all of which must be done at the University:

(1) English 2 to be taken in the first year.

First-year students must take English A (page 159) if they fail to pass a test set by the Department of English.

Any student who is not taking English A or who has not taken it, may be required by the Faculty, on recommendation of the Board of Studies, to do so.

Once a student is enrolled in English A, this course becomes one of the requirements for his degree.

Students who pass a test in December will be given credit in the course; otherwise they must continue in it until they have passed an examination.

(2) Philosophy 1 ordinarily taken in the first year.

Students who, because of conflicts in the timetable, cannot take Philosophy 1 in the first year must take Philosophy 5 in one of the upper years.



- (3) One course in Psychology, History, Economics or Politics.
- (4) One language course in addition to English 2 (For example, French 1 if the student has Grade XII French; French 2 if the student has Grade XIII French; similarly in Latin, German, Greek, Spanish).
- (5) One science.

B. Concentration of work to the extent of three university courses in each of the three subjects, or five courses in one subject, four courses in another. Regulation 2 under each departmental prescription gives the sequence of courses approved by the department concerned. Students electing to offer the concentration of five and four rather than three groups of three, must select their advanced courses in consultation with the department concerned and they must have the prerequisites for these courses.

Additional classes to make up the required total may be freely chosen subject to the regulations governing prerequisites.

Candidates must make a standing of Grade B or better in at least half their work at the University. In courses numbered 10 or over 62% counts as the equivalent of Grade B.

In arranging the concentration of work on the Course of study for the Pass B.A., students should select logical combinations of subjects, for example, English, History and French, or Philosophy, History and Politics, or Mathematics, Physics and Chemistry. Those preferring to offer five courses in one subject and four courses in another are advised to choose related subjects.

The following programmes illustrate how the Pass Course may be planned:

#### ENGLISH, HISTORY, FRENCH

<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>
English 2	English 3 or 5 or 7	English 3 or 5 or 7
Philosophy 1	French 3	French 14
History 3	History 5	History 6
French 2	two options	two options
α science†		

## PHILOSOPHY, ECONOMICS, POLITICS

<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>
English 2	Philosophy 5	Philosophy 23
Philosophy 1	a science†	Economics 10 or 12
Politics 2	one option	or 13 or 23
Economics 4	Economics 10 or 12	Politics 31
a language‡	or 13	two options
	Politics 30	
	B standing in Economics 4 and Politics 2 is required for ad- mission to Economics 10 and Politics 30 respectively.	

## MATHEMATICS AND PHYSICS, BIOLOGY, CHEMISTRY

The following programme presupposes Grade XIII standing in Mathematics, Physics and Chemistry. If the student has also Grade XIII standing in Biology, the work in Biology will be: first year—Biology 10 or 16; second year—Biology 10 or 16; third year—Bacteriology 10 or Biology 26. If Physics has not been taken in Grade XIII, the student will have to offer Physics 1 as one of the options since it is prerequisite to Physics 2. If Chemistry has not been taken in Grade XIII, the student may take Chemistry 1 in the first year, Chemistry 2 in the second year, and Chemistry 11 or 12 in the third year.

<i>First Year</i>	<i>Second Year</i>	<i>Third Year</i>
English 2	Biology 10	Biology 16
Biology 1	Chemistry 11	Chemistry 12
a language‡	Mathematics 3a, 7b	Physics 2
Mathematics 2	or 10a, 11b	two options
Chemistry 2	Philosophy 5	
	one option	

† May be one of Biology, Physics, Chemistry, Geology.

‡ May be one of French, German, Greek, Latin, Spanish.

An "A" course does not fulfil this requirement.

## HONOURS COURSES LEADING TO THE DEGREE OF BACHELOR OF ARTS

There are several types of Honours Courses:

- (a) The Specialized Honours Course.
- (b) The General Honours Course (see page 109, Section III).
- (c) The Honours Course for students preparing for admission to the Ontario College of Education for teachers' certificates in English and French, English and Latin, Latin and French, French and German or Spanish (see page 111, Section III, Interim High School Assistant's Certificate, Type A).

### I. ADMISSION TO HONOURS

(a) At the end of the first year candidates for Honours must make formal application to the Registrar. These applications are referred first to the departments concerned for recommendation, and then to the Committee of Departments for final action.

Candidates are admitted to an Honours Course if in their special subjects they have made at least 62% in the preceding Pass class and at least 60% in the preceding class numbered 10 or over, and if their standing in other subjects is considered satisfactory. Candidates offering Pass or Honours courses from a second Department as part of their Major are required to make at least 55% in these courses. They should note that these courses will be taken into account when the final standing for the degree is determined.

(b) At the end of each year each candidate's record is reviewed by the Committee of Departments to determine fitness to proceed in Honours. All not doing satisfactory work are required to revert to a Pass Course.

### II. GENERAL PLAN OF SPECIALIZED HONOURS COURSES

The specialized Honours degree may be taken in the following departments: Biochemistry, Biology, Chemistry, Greek, Latin, English, French, Geological Sciences, German, History, Mathematics, Philosophy, Physics, Political and Economic Science, Psychology and Spanish.

The programme is made up of eighteen courses from Grade XIII standing in five subjects, with a major consisting of lecture and reading courses in the subject of the degree, a minor made up of lecture courses in a related subject, and compulsory general courses. The requirements for each degree Course are outlined in detail under the departmental prescriptions.

### III. GENERAL PLAN FOR GENERAL HONOURS COURSE

The General Honours Course is intended for the student who does not plan to specialize to the extent required by the specialized Honours Course but who wishes to have a programme providing for advanced work in three subjects of study. The requirements for degree are made up of nineteen courses from Grade XIII in five subjects (twenty courses from Grade XIII in four subjects) as follows:

(a) Lecture courses in each of the three special subjects (see course requirement for each subject under the departmental prescription).

(b) One reading course in each of the three special subjects.

(c) Compulsory general courses as required on the specialized Honours Course.

(d) The candidate is required to take, in addition to course examinations, one general examination in each special subject.

The regulations applying to specialized Honours Courses apply also to the General Honours Course.

### IV. LENGTH OF COURSE

The Course for the degree of B.A. with Honours normally covers four years from Grade XIII in five subjects. Ordinarily candidates are not permitted to register in any academic year in more than five courses including reading courses. It is possible, however, for candidates of exceptional ability to complete the Course in three years from Grade XIII by taking five regular lecture courses or the equivalent in hours in each of the three years, and by doing the reading courses in the penultimate and final years and in the intervening summer. Such candidates must have passed with Grade A standing in each special subject and an average of Grade A on the year's work preceding admission to Honours.

### V. FINAL YEAR EXAMINATIONS ON THE HONOURS COURSES

In addition to the regular sessional examinations, candidates must write general examinations at the conclusion of their Course as follows:

(i) Specialized Honours Course—two general examinations in the major subject.

(ii) General Honours Course—one general examination in each of the three special subjects.



(iii) Courses for students preparing for admission to the Ontario College of Education for teachers' certificates in English and French, English and Latin, Latin and French, French and German or Spanish—one general examination in each of the two subjects.

It should be noted that Departments may, with the permission of the Faculty, excuse students in the final year from course examinations in the Major subject and give four or five general examinations.

## VI. CLASSES IN HONOURS

Degree standing is awarded in the specialized Honours Course on the basis of proficiency in honours courses in the major subject; in the General Honours Course, in the three subjects combined; in the Courses leading to Teachers' Certificates in the languages, in the two special subjects.

## VII. PASS DEGREE ON AN HONOURS COURSE

Candidates who pass all their classes but fail to attain honours because they have made less than 60 per cent in one or both of the major and minor are granted a Pass degree.

## VIII. HONOURS COURSES IN LANGUAGES (SPECIALIST)

The Honours Course for students preparing for admission to the Ontario College of Education for specialist work in English and French, English and Latin, Latin and French, French and German or Spanish is described on page 111, Section III, Teacher's Certificates.

## SOCIAL WORK

Students who wish to proceed to social work after graduation should choose a programme of undergraduate courses which so far as possible includes Psychology, Sociology, Politics and Economics. Courses in Canadian and English History are also desirable. Directors of Canadian Schools of Social Work are willing to give advice to undergraduates wishing to plan a course acceptable to the Admissions Committees of their schools.

## COURSES FOR TEACHERS' CERTIFICATES IN THE PROVINCE OF ONTARIO

### I. PERMANENT FIRST CLASS CERTIFICATE

Students holding the Interim First Class Certificate may satisfy the academic requirements for the Permanent Certificate by taking



five university courses. Some of the classes which may be completed by extramural work are: English 2, Latin 2, History 3, Philosophy 1, Psychology 2, Economics 4, Politics 2, Mathematics 2. Classes in science and modern languages must be taken in residence either during a regular winter session or by extramural and summer school work.

## II. HIGH SCHOOL TEACHER'S CERTIFICATE

Under the regulations of the Ontario Department of Education a candidate for a High School Teacher's Certificate who holds a First or Second Class certificate and who has had experience in the Public, Separate or Continuation Schools of the Province may be partially relieved from attendance at the Ontario College of Education.

The academic standing for admission to the professional Course leading to the Interim High School Assistant's certificate, Type B, is the degree of Bachelor or Master of Arts, Bachelor or Master of Science, or Bachelor of Commerce, from a university within the Commonwealth, based upon Courses approved by the Minister of Education.

## III. INTERIM HIGH SCHOOL ASSISTANT'S CERTIFICATE, TYPE A

By an agreement between Queen's University and the Department of Education of Ontario, graduates of the Faculty of Arts in certain specified Honours Courses may be certified as having completed the academic requirements for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, at the Ontario College of Education.

The Department of Education has authorized certificates as follows:

Classics	History
Latin and French	Mathematics
Latin and English	Mathematics and Physics
English	Science
English and French	Commerce
French and German or Spanish	Physical and Health Education

Candidates for admission to the course of study at the Ontario College of Education leading to the Interim High School Teaching Assistant's Certificate, Type A,

- (α) In Classics, take the regular Honours degree Course in Latin and Greek (see pages 147 and 152).

(b) in Latin and French or English, take

Latin 2, 12, 13, Greek and Roman History 4 and two of  
Latin 20, 30, Greek and Roman History 51, and

English 2 or 5, 10, 14, 15, 20, 22, or

French 2, 10, 11, 20, 21, 23

Classics Reading Course 1 and 2 and English Reading  
Course 1 or French Reading Course 1, or

Classics Reading Course 1 and two reading courses in  
English or in French

Compulsory general courses: Philosophy 1, a science,  
a free option. If the candidate has Grade XIII standing  
in a science, the second general course may be a free  
option

One general examination in each of the two special  
subjects;

(c) in English and French, take

English 2 or 5, 10, 14, 15, 20, 22, and

French 2, 10, 11, 20, 21, 23

Two reading courses in English and one in French, or two  
reading courses in French and one in English

Compulsory general courses: Philosophy 1, Latin 2, a  
science. If the candidate has Grade XIII standing in a  
science, the second general course may be a free option.

One general examination in each of the two special  
subjects;

(d) in French and German or Spanish, take

French 2, 10, 11, 20, 21, 23, and

German 2, 10, 12, 14, 15, 16, or

Spanish 2, 10, 22, 24, 29, 30

Two reading courses in French and one reading course in  
German or in Spanish, or one reading course in French  
and two reading courses in German or in Spanish

Compulsory general courses: English 2, Latin 2, Philo-  
sophy 1.

If the candidate has not offered a Grade XIII science on  
admission, a course in science must be taken in place  
of the reading course in the subject in which two read-  
ing courses are normally required.

One general examination in each of the two special  
subjects;

- (e) In English, take the specialized Honours degree Course in English (see page 157) with a minor in Social History as follows:

History 3 or 5 or 6, 12, and two courses to be selected from History 14a, 16, 18a, 18b, 19, 24a, 24b, 28.

French 2 or German 2 must be included among the general courses;

- (f) in History, take the regular Honours Course in History (see page 187) with a minor in Political and Economic Science made up of

Economics 4, Politics 2, Economics 10, and two further courses in Politics or Economics

Geology 1 and History Reading Course 5 are also prescribed.

- (g) in Mathematics, take the Honours Course in Mathematics with a minor to be selected on the advice of the Department of Mathematics;

- (h) in Mathematics and Physics, take the Honours Course in Mathematics and Physics or Physics and Mathematics;

- (i) in Science, take the General Honours Course in Science for Teachers as follows:

(a) Biology 10, 11, 16, 19, Reading Course 1

(b) Chemistry 2, 11, 12, 14 or 17, Reading Course 1

(c) Physics 2, 11, 14a, 13b, Reading Course 1, Mathematics 2

(d) Compulsory general courses to complete the work for degree:

English 2, Philosophy 1 or 5, a language, a free option

If the candidate has Grade XIII standing in a language he may use the third general course as a free option

(e) One general examination in each special subject,

or the regular Honours Course in two of Biology (see page 130), Chemistry (see page 138) Physics (see page 212) with two courses from the third science in place of free options or in substitution for courses ordinarily prescribed. For example, with Chemistry as major, Biology as minor, Physics 1 unless already taken in Grade XIII is offered in place of the free option and Physics 2 is substituted for one of Chemistry 22, 24, 25. Similarly, with Biology as major and Chemistry as minor, Physics 1 unless offered as

one of the subjects of Grade XIII is taken as one of the courses in the minor and Physics 2 as the supporting course or in place of a free option as prescribed under the departmental prescription for Biology. With Physics as major, Biology as minor, Chemistry 1 is offered in place of a free option and Chemistry 2 in place of a reading course. With Chemistry as major, Physics as minor, Biology 1 unless already taken as one of the subjects of Grade XIII is offered in place of the free option and Biology 10 or 16 is substituted for one of Chemistry 22, 24, 25.

#### IV. COMMERCIAL SPECIALIST'S CERTIFICATE

Students working with the Department of Education towards the Commercial Specialist's Certificate are granted exemption from attendance and examination in the following subjects if they pass the equivalent university courses with Grade A or B standing. They are given exemption from attendance only if they pass the courses with Grade C standing:

Department of Education Courses	University Equivalent
Arithmetic of Investment	Mathematics 7b
History of Commerce and Industry	Economics 4
Theory of Economics	Economics 10
Money and Banking	Economics 12
Business Law	Commerce 60
Bookkeeping	Commerce 63
Accountancy Theory	Commerce 64
Accountancy Practice	Commerce 67b

Note: Theory of Economics is equivalent to Economics 1 in calendars prior to 1939-40.

Graduates in Commerce whose courses have included Mathematics 7b and Commerce 67b are exempted from attendance and examination in all the subjects of the Commercial Course (Accountancy Option) except Shorthand Theory, Shorthand Practice and Transcription, Typewriting, Penmanship, Office Practice and Business Papers, Minor and Major Methods.

#### V. INTERIM HIGH SCHOOL ASSISTANT'S CERTIFICATE, TYPE A

##### For Graduates in Applied Science

Graduates of the Faculty of Applied Science may obtain the standing required for the Interim High School Assistant's Certificate, Type A, by taking certain additional courses as stated below.



## 1. In Mathematics and Physics

A degree in Applied Science in one of the Courses of Mining Engineering, Chemistry, Geological Sciences, Chemical Engineering, Metallurgical Engineering, or Civil Engineering, with a subsequent standing of at least 55 per cent in each of the following courses and an average of at least 66 per cent in the work of each subject:

Mathematics 12a, 15b, 19, and one other course, numbered over 19

Physics 10a, 12b, 13b, 14a,

credit towards these being given when equivalent subjects have been satisfactorily taken in Course.

A degree in Applied Science in the Department of Electrical Engineering or Mechanical Engineering with subsequent standing of at least 55 per cent in each of the following courses, and an average of at least 66 per cent on the work of each subject:

Mathematics 12a, 15b, and one other course, numbered 19 or over

Physics 10a, 12b, 13b, 14a,

credit towards these being given when equivalent subjects have been satisfactorily taken in Course.

A degree in Applied Science in the Department of Physics with an average of at least 66 per cent in Mathematics VII, Mathematics VIII and Mathematics X and with subsequent standing of at least 55 per cent in each of the following courses and an average of at least 66 per cent:

Physics 10a, 12b, 13b, 14a,

credit towards these being given when equivalent subjects have been satisfactorily taken in Course.

2. For the Interim High School Assistant's Certificate,  
Type A, in Science

A degree in Applied Science in one of the Departments of Mining Engineering, Chemistry, Geological Sciences, Chemical Engineering, Metallurgical Engineering or Physics, with a subsequent standing of 55 per cent in each of the following courses and an average of at least 66 per cent in the work of each subject in courses numbered 10 or over:

Biology 1 or Grade XIII Biology, 10, 16, 11 or 19,

Physics 11, or 14a and 13b,

Geology 1, 2,

Chemistry 11, and one of 12, 14, 17 not previously taken,

credit towards these being given when equivalent subjects have been satisfactorily taken in Course.

## VI. INSPECTORS' CERTIFICATES

The academic requirements for a Public School Inspector's certificate are as follows:

(1) An Honours degree in Arts or the degree of B.Com. (Commercial Specialists' Option) in accordance with the present agreement as prescribed for Specialist qualifications, or

(2) A Pass degree in Arts with a standard of 66 per cent in any five courses beyond course 1, and Grade B in any other five courses.

(3) Candidates shall extend their Course over at least four years from the Secondary School Graduation Diploma and they shall fulfil the residence requirement prescribed by the Faculty of Arts for a degree in Arts (see page 56 regulation 13).

## COMBINED COURSE IN ARTS AND PHYSICAL AND HEALTH EDUCATION

A Course of study leading to the degrees of Bachelor of Arts and Bachelor of Physical and Health Education in four years

### ADMISSION REQUIREMENTS

The Secondary School Graduation Diploma or its equivalent, including English, a second language, History, Mathematics and two options, and Grade XIII standing or its equivalent in English, Latin or Mathematics and two or three other subjects. Students entering with as few as four subjects, that is, English, Latin or Mathematics and two further subjects, are required to have not lower than third class Honours standing in at least three of these subjects. (See page 47, Regulation 3(a) (b).)

Candidates are advised to offer Grade XIII English, Mathematics (at least two papers, of which one should be Trigonometry), Physics, Chemistry and one optional subject.

### SUBJECTS OF INSTRUCTION

		First Year	Hours Per Week
*One or two of			
Biology 1	)	3 hours' lectures	
Chemistry 1	)	2 hours' laboratory	5
Physics 1	)		

English 2 (A general introduction to English literature)	3
Psychology 2 (An elementary survey of mental life) ..	3
A language other than English .....	3
Free option, subject to timetable, for students taking only one science .....	3

## Physical Education

Women—Seasonal sports (tennis, basketball, badminton, volleyball) .....	)	
Gymnastics and dancing .....	)	5
Aquatics .....	)	
Men —Seasonal sports (track and field athletics, basketball) .....	)	
Gymnastics and apparatus .....	)	5
Aquatics .....	)	

\* The selection from the courses in science will be dependent on the science or sciences offered at Grade XIII level. A student entering with Chemistry as part of his Grade XIII programme will take in his first year at the University Biology 1 and Physics 1. A student entering with Grade XIII standing including two sciences, e.g., Physics 1 and Chemistry 1, will take in his first year Biology 1 plus a free option.

## Second Year

Philosophy 5 (Types of Philosophy) .....	3
Psychology 8 (An introduction to child psychology) or 12 (Principles of child development) .....	3
Politics 2 (Introduction to government and politics) ..	3
English 3* (The English Novel) .....	3
Biology 16 (Comparative vertebrate anatomy) 2 hours' lectures, 3 hours' laboratory .....	5

## Physical Education

Women—Seasonal sports (archery, track and field athletics) .....	)	
Gymnastics and dancing .....	)	5
Rules and officiating .....	)	
Aquatics .....	)	
Men —Seasonal sports (football, hockey) .....	)	
Rules and officiating .....	)	
Gymnastics and apparatus .....	)	5
Aquatics .....	)	

## Third Year

English 7* (Canadian and American literature) .....	3
Psychology 6 (An introduction to social psychology ..	3
Two free options selected within the limitations of the timetable .....	6
Physiology—2 hours' lectures, 2 hours' laboratory .....	4

## Physical Education

Women—Seasonal sports .....	)	5
Gymnastics and dancing .....		
Advanced coaching .....		
Men —Advanced coaching .....	)	5
Gymnastics and apparatus .....		
Recreational games and sports .....		

\* English 3 and 7 are not compulsory. The candidate may make up a group by offering courses in another subject but care must be taken to provide for a total of three courses in the subject over a period of three years. Economics 4, Politics 2 and Sociology may be offered as a group; Biology 16, 26 and Anatomy of the fourth year may be offered as a group.

## Fourth Year

Specialized Study under the Direction of the Staffs of  
The School of Physical and Health Education and The  
Faculty of Medicine

Anatomy .....	4
Preventive Medicine .....	2
Evaluation .....	1
History of physical education .....	1
Interpretations and objectives .....	1
Methods and materials in physical and health education .....	4
Recreation and playground administration .....	1
Camping .....	1
Crafts .....	2
Training and conditioning .....	1
Practice teaching and field work .....	2
Gymnasium practice .....	3

By agreement between Queen's University and the Ontario Department of Education a graduate of the Course in Arts and Physical and Health Education is admitted to the course of study at the Ontario College of Education leading to the Interim High School Assistant's Certificate, Type B, and to the High School Assistant's Certificate, Type A, in Physical and Health Education.



## FEES

Fees are payable each year upon registration.

A student is not registered and may not attend classes until he has paid the required fees.

## SESSIONAL FEE

including Registration, Tuition, Library, Examinations:

First, second and third years .....	\$ 265.00
Fourth year .....	275.00

## STUDENT INTERESTS

Including Health Insurance, Union, Faculty Societies, Alma Mater, Journal, and Athletics (the athletic fee which is part of student interests gives admission to all home games except playoffs) .....	43.50
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The fees listed below are payable as they are incurred:

## Laboratory Fee

A fee is charged for all courses in science—

For each course in science, except Chemistry .....	5.00
For each course in Chemistry .....	10.00
Maximum charge for courses in science .....	20.00

## Graduation Fee

Bachelor of Arts .....	10.00
Bachelor of Physical and Health Education .....	10.00
Extra fee for degree <i>in absentia</i> .....	10.00

## Special Charges

Fee for pro tanto allowance on work done at another institution .....	10.00
Late registration (see also note page 5) minimum .....	5.00
Change of courses after registration .....	2.00
Late application—for examination or graduation .....	3.00

## COMBINED COURSE IN ARTS AND THEOLOGY

A Course leading to the Degree of B.A. and the Testamur in Theology in five years.

Queen's University and Queen's Theological College join in offering a Combined Course in Arts and Theology. The complete Course covers five years. The first and second years are entirely within the Faculty of Arts and candidates must be fully qualified for admission to this Faculty. The third year consists of one class in Arts, for which a fee of \$50 is charged, and the first year in Theology. The fourth and fifth years of the Combined Course are the second and third years in Theology.

The degree of Bachelor of Arts is awarded at the end of the third year to candidates who have passed in all their subjects and made Grade B in at least half of the classes offered for the B.A. degree. The Testamur in Theology is granted after the successful completion of the fifth year. Additional courses in Theology equivalent to at least one year of further study are required for the degree of Bachelor of Divinity.

#### First Year

English 2  
Greek 1  
Hebrew 1  
A science  
Philosophy 1

#### Second Year

Option  
Greek 2  
Hebrew 2  
Option  
Option

#### Third Year

An Arts course  
Church History  
Systematic Theology  
Old Testament Criticism  
New Testament Criticism  
Practical Theology and  
Public Speaking

#### Fourth Year

Church History  
Systematic Theology  
Old Testament Criticism  
New Testament Criticism  
Practical Theology

#### Fifth Year

Church History  
Systematic Theology  
Old Testament Criticism  
New Testament Criticism  
Practical Theology

Students who offer Greek as one of the subjects on the Secondary School Graduation Diploma may take Greek 1 in the first year, and a freely chosen class in place of Greek 2 in the second year.

Students on the Combined Course in Arts and Theology whose Grade XIII programme did not include Greek, may offer a second course in Philosophy in place of Greek 2.

In choosing options students must plan to complete three courses in each of two subjects by the end of the third year.

## GRADUATE COURSES

### DEGREE OF MASTER OF ARTS

1. In the requirements for the degree of Master of Arts the emphasis is placed upon the candidate's grasp of the prescribed subjects and upon his ability to work with some independence, particularly in the field represented by his research and the content of his thesis. A reading knowledge of French and German is a decided advantage.

2. The degree of Master of Arts is awarded in recognition of the satisfactory completion of a Course of intensive study under the direction of one department of the Faculty of Arts.

This work includes the following:

I. Research and thesis.

II. Advanced courses, normally two in number. Graduate students taking courses open also to undergraduates will be required to do additional work in such courses.

The weight of work required is that of a full academic year, of which ordinarily half is represented by the research and thesis.

The department may require the candidate to attend certain lectures cognate to the Course of study.

3. A candidate for the degree of Master of Arts must have taken the degree of Bachelor of Arts with first or second class honours. The department concerned may, however, recommend that any application be not accepted.

4. Application for permission to become a candidate for the degree of Master of Arts must be made to the Registrar at least two weeks before the opening of the session. Applicants who are not graduates of Queen's University must send official certificates giving full details of their previous academic training, including courses taken and grades received, together with a marked Calendar showing the content of the courses. All applicants must specify the field in which they desire to carry on their studies.

5. The Board of Graduate Studies deals with the applications of candidates and the prescriptions of work officially proposed for each.

6. All candidates must take the following final examinations:

I. Written examinations on all courses prescribed.

The minimum standing required in each of these examinations is that of second class honours.

II. An oral examination on the subject of the candidate's research. The examination is conducted by—

(a) At least two members of the department concerned.

(b) At least two other members of the teaching staff of the University not members of the department concerned, to be selected by the department concerned.

The chairman of the Board of Graduate Studies acts as the chairman for the examination or appoints some member of the University teaching staff, not a member of the department concerned, to do so.

Each candidate for the Master's degree must submit three typed copies of his thesis to the Registrar, not less than three weeks before the date of the Convocation at which he plans to obtain the degree. The thesis must be read and approved by members of the examining board before the candidate is admitted to the oral examination. Two copies of the thesis become the property of the University, one of them is deposited in the University library, the other is placed in the care of the department concerned.

7. Except by special permission of the Board of Graduate Studies, candidates are required to do all the work for the Master's degree in residence.

8. A candidate in full-time employment in the University or elsewhere is not normally accepted as a candidate for the Master's degree.

9. The fees charged are outlined on page 64.

## GRADUATE RECORD EXAMINATIONS

Queen's University welcomes the submission of Graduate Record Examination scores by any student applying for a scholarship and for admission to graduate work. This examination requires no special preparation. It is intended as an additional measure of the candidate's general preparation. For information regarding the examination, application should be made to GRADUATE RECORD EXAMINATION, Box 592, PRINCETON, NEW JERSEY. The fee for the examination is \$12.00.



## THE MILLER ANALOGIES TEST

Some universities in the United States require applicants for admission to their graduate schools to take the Miller Analogies Test. Queen's University is a recognized centre for administering this test and arrangements may be made through Professor Blackburn of the Department of Psychology for any student who wishes to take it. The fee is \$1.25.

## THE DEGREE OF DOCTOR OF PHILOSOPHY

Information about requirements for the degree of Doctor of Philosophy may be found in the Calendar of Graduate Studies.

## DETAILS OF COURSES OF INSTRUCTION

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### ART

André Biéler, RESIDENT ARTIST AND PROFESSOR

#### REGULATIONS AND ANNOUNCEMENTS

Art 1, Art 2 and Art 3 are offered in consecutive years and may be counted towards the degree of Pass B.A. either as a group or as individual free options. On recommendation of the departments concerned, students may apply to the Faculty of Arts for permission to combine courses in Fine Arts (Art, Music, Drama) to make up a group towards the degree of Pass B.A.

The aim of the courses is to show that the essential character of each period in history has been given expression through its art.

#### COURSES OF INSTRUCTION

##### ART 1. (Offered in 1953-54.)

Prehistoric art in Europe, Ancient, Classical, Oriental and North American art.

##### ART 2. (Offered in 1954-55.)

Early Christian, Romanesque and Gothic art; Renaissance and Baroque art in Italy.

##### ART 3. (Offered in 1952-53.)

Renaissance and Post Renaissance art in Northern and Western Europe; Modern art of the nineteenth and twentieth centuries.

#### STUDIO:

In conjunction with the lectures, there is a studio session, where, by actual practice, the student studies the different technical aspects of the arts of successive periods.

Text: *Art through the Ages*, by Helen Gardiner, 3rd Edition.

For students offering Art as a group  
*Art Appreciation*, Hugo Beigel Steven, Day Press.

LECTURE PERIOD—*Monday and Thursday*, 4.30-5.30.

STUDIO PERIOD—*Tuesday*, 3.30-5.30.

## BACTERIOLOGY

G. B. Reed, O.B.E., M.A., B.Sc., Ph.D., F.R.S.C., PROFESSOR

J. H. Orr, M.D., C.M., F.R.C.P. (C), PROFESSOR

E. W. R. Campsall, B.A., M.D., DEMONSTRATOR

### REGULATIONS AND ANNOUNCEMENTS

1. Students on the Course for Nurses are required to take Bacteriology 10. Students on a Pass Course taking Biology as one of the subjects of concentration may offer Bacteriology 10 as part of the Biology prescription.

2. Students taking Biology for honours may include Bacteriology 13 and 14 in their Course. They should consult the head of the department.

### COURSES OF INSTRUCTION

#### BACTERIOLOGY 10. INTRODUCTORY COURSE.

An introductory course in general and pathogenic bacteriology primarily for nurses and pass students.

Prerequisites: 2 courses in Biology and 2 courses in Chemistry.

LECTURES—*Monday and Wednesday at 10.*

LABORATORY—*Friday, 1.30 - 4.30.*

#### BACTERIOLOGY 13. GENERAL MEDICAL BACTERIOLOGY.

A systematic study of the disease producing bacteria, infection and immunity. For honours students.

LECTURES—*Monday, Wednesday, Friday at 9.*

LABORATORY—*Monday and Wednesday, 1.30 - 4.30,  
or Tuesday and Thursday, 1.30 - 4.30.*

#### BACTERIOLOGY 14. IMMUNOLOGY.

For honours or graduate students.

Hours to be arranged.

(Alternate years, not 1952-53.)

#### BACTERIOLOGY 15. THE VIRUSES AND RICKETTSIA.

For honours and graduate students.

Hours to be arranged.

(Alternate years to be given in 1952-53.)

#### BACTERIOLOGY 16.

Advanced General Bacteriology for graduate students.

Hours to be arranged.

(Alternate years, not given in 1952-53.)

#### BACTERIOLOGY 20. RESEARCH IN BACTERIOLOGY.

## BIOCHEMISTRY

J. M. R. Beveridge, B.Sc., Ph.D., M.D., CRAINE PROFESSOR OF  
BIOCHEMISTRY

R. O. Hurst, B.A., Ph.D., ASSISTANT PROFESSOR

### REGULATIONS AND ANNOUNCEMENTS

#### The Honours Course in Biochemistry.

Candidates planning to take the Honours Course in Biochemistry are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), French or German, Physics, and Chemistry. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

Students are admitted to the Course in Biochemistry in the third year if they have completed Biology 1 (General biology), Chemistry 2 (General chemistry), Chemistry 11 (Analytical chemistry), Chemistry 12 (Organic chemistry) with satisfactory standing. The first course in Biochemistry is Biochemistry 16. Students must consult the head of the department before registering in any courses in Biochemistry, but may apply for the Honours course in Biochemistry at the beginning of the second year.

The programme for the degree is as follows:

		BIOLOGY
(a)	BIOCHEMISTRY	1 (General biology)
	16 (General biochemistry)	16 (Comparative vertebrate anatomy)
	20 (Advanced biochemistry)	26 (Animal physiology)
	R1 (Reading course)	
	R2 (Reading course)	
	R3 (Problem in biochemistry)	CHEMISTRY
		2 (General chemistry)
		11 (Analytical chemistry)
		12 (Organic chemistry)
		14 (Physical chemistry)
		22 (Advanced organic chemistry)

One optional course which may be either Bacteriology 13 (General medical bacteriology) or Biology 21 (Plant physiology). If Biology 21 is selected, Biology 10 (General botany) must be taken as a prerequisite.

(b) Compulsory general courses to complete the work for the degree:



English 2, Philosophy 1 or 5, Mathematics 2, a language. If the candidate has Grade XIII standing in a language he may take a free option as the fourth general course. German is advised if the candidate plans to proceed to an advanced degree.

- (c) Two general examinations in Biochemistry, one written and one oral.

The work for the Course in Biochemistry requires four years and is normally arranged as follows:

First Year	English 2, Biology 1, Chemistry 2, Mathematics 2, a general course which should be French or German if the student has not completed Grade XIII standing in a language.
Second Year	Chemistry 11, Chemistry 12, Biology 16, Philosophy 5. Biology 10 should be taken in this year if Biology 21 is to be offered as the option in the third year.
Third Year	Biochemistry 16, Biology 26, Bacteriology 13 or Biology 21, Chemistry 14.
Fourth Year	Chemistry 22, Biochemistry 20, Biochemistry R1 (Vitamins and Hormones), Biochemistry R2 (Enzymology), Biochemistry R3 (Problem in Biochemistry).

#### COURSES OF INSTRUCTION

##### BIOCHEMISTRY 16. INTRODUCTION TO BIOCHEMISTRY.

This course involves a study of the chemical properties of the components of the diet—proteins, fats, carbohydrates, vitamins and minerals. The role of each of these components in nutrition is considered together with the processes of digestion, absorption, intermediary metabolism, and excretion.

The lectures in this course are combined with those given in Biochemistry 18.

Prerequisites: Chemistry 2, 11, 12; Biology 1.

Texts: West and Todd, *Text Book of Biochemistry*, recommended for Honours students in Biochemistry; Mitchell, *Text Book of Biochemistry*; Harrow, *Text Book of Biochemistry*.

LECTURES—Monday, Wednesday, Friday at 11; Saturday at 9.

LABORATORY—Wednesday or Thursday, 1.30-4.30 throughout the year.

A change in hours for lectures and laboratory may be made.

## BIOCHEMISTRY 18. ANIMAL BIOCHEMISTRY.

This course is designed for medical students, but graduate students may register for it after consulting the head of the department. The general outline is the same as that given for Biochemistry 16 but in the second term particular attention is paid to the study of metabolic disturbances, their detection by means of biochemical tests, and the application of these procedures in the practice of medicine.

Prerequisites: Chemistry 2, 11, 12; Biology 1, 16.

Texts: Everett, *Medical Chemistry*; Kleiner, *Human Biochemistry*; Hawk, Oser and Summerson, *Practical Physiological Chemistry*.

LECTURES—Monday, Wednesday, Friday at 11; Saturday at 9.

LABORATORY—Wednesday or Thursday, 1.30-4.30.

A change in hours for lectures and laboratory may be made.

## BIOCHEMISTRY 20. ADVANCED BIOCHEMISTRY.

A study of the nutrition and metabolism of micro-organisms and higher animals with special emphasis on the contribution of these studies to our understanding of the fundamental biochemical activities of living cells.

Prerequisites: Biochemistry 16 or 18.

Texts: Baldwin, *Dynamic Aspects of Biochemistry*; West and Todd, *Text Book of Biochemistry*.

LECTURES—Tuesday and Thursday at 10.

LABORATORY—Tuesday, 1.30-4.30.

## READING COURSES IN BIOCHEMISTRY:

R 1. Vitamins and Hormones.

R 2. Enzymology.

R 3. Each student will be assigned a problem in biochemistry on which he must work at least two afternoons per week in the laboratory. A written report concerning the study must be presented at the end of the term.

## GRADUATE WORK

Candidates interested in graduate work should consult the head of the department.

## BIOLOGY

R. O. Earl, E.D., B.A., S.M., Ph.D., THE JOHN ROBERTS ALLAN  
PROFESSOR OF BIOLOGY

G. Krotkov, B.S.A., M.A., Ph.D., F.R.S.C., PROFESSOR

A. S. West, B.Sc., Ph.D., PROFESSOR

H. W. Curran, B.S., M.A., Ph.D., ASSOCIATE PROFESSOR

M. E. M. Sawyer, M.A., Ph.D., ASSISTANT PROFESSOR OF  
PHYSIOLOGY

H. M. Good, B.A., Ph.D., ASSISTANT PROFESSOR

J. R. W. Vallentyne, B.A., LECTURER

### REGULATIONS AND ANNOUNCEMENTS

1. Grade XIII standing in Biology or Biology 1 is prerequisite to all other courses in this department.

2. Candidates offering Biology as one of the subjects of concentration on the Pass Course take Biology 1 (General biology), 10 (General botany), 16 (Comparative vertebrate anatomy), if they have not included Biology in their Grade XIII programme; Biology 10, 16, Bacteriology 10 (Introductory bacteriology) or a third course in Biology selected on the advice of the department, if they have offered Biology of Grade XIII as one of the subjects for admission.

3. For information in regard to scholarships see pages 77 and 78.

4. The Honours Course in Biology.

Candidates planning to take the Honours Course in Biology are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), Biology (Botany and Zoology), a language, and a fifth subject which should be Chemistry or Physics. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

(a) The Major.

The major is made up as follows:

### COURSE FOR TEACHERS

Biology 10 (General botany)  
 Biology 11 (Phanerogamic botany)  
 Biology 12 (Cryptogamic botany)  
 Biology 16 (Comparative vertebrate anatomy)  
 Biology 17 (Invertebrate zoology)  
 Biology 18 (Entomology) or  
 Biology 19 (Economic vertebrate zoology)  
 Biology 45 (Evolution and genetics)  
 One other course in Biology which normally would be Biology 21 (Plant physiology) or 26 (Animal physiology)  
 Biology R1 (Biological theories)  
 Biology R2 (General physiology)  
 Biology R3 (Biological aggregations) or  
 Biology R4 (Advanced entomology)

### COURSE FOR BOTANISTS

Biology 10 (General botany)  
 Biology 11 (Phanerogamic botany)  
 Biology 12 (Cryptogamic botany)  
 Biology 13 (Plant pathology)  
 Biology 21 (Plant physiology)  
 Biology 31 (Plant ecology)  
 Biology 45 (Evolution and genetics)

With one supporting course  
 Physics 2 (Light and electricity and magnetism) or a course in zoology

Biology R1 (Biological theories)  
 Biology R2 (General physiology)  
 Biology R3 (Biological aggregations)

Bacteriology 10 (Introductory bacteriology) may be substituted for  
 Biology 13

### COURSE FOR ZOOLOGISTS

Biology 16 (Comparative vertebrate anatomy)  
 Biology 17 (Invertebrate zoology)  
 Biology 18 (Entomology)  
 Biology 19 (Economic vertebrate zoology) or  
 Biology 20 (Histology and embryology)

Biology 26 (Animal physiology)  
 Biology 45 (Evolution and genetics)

With two supporting courses

Bacteriology 10 (Introductory bacteriology) and Physics 2 (Light and electricity and magnetism) or a course in botany

Biology R1 (Biological theories)  
 Biology R2 (General physiology)  
 Biology R3 (Biological aggregations) or

Biology R4 (Advanced entomology)



## (b) The Minor.

Chemistry 1 (General chemistry), unless the candidate has Grade XIII standing in Chemistry.

Chemistry 2 (General chemistry).

Chemistry 12 (Organic chemistry).

Biochemistry 16 (General biochemistry).

Physics 1 (Mechanics, properties of matter, heat, wave-motion, sound, light, electricity, and magnetism).

## (c) Compulsory general courses to complete the work for degree:

English 2, Philosophy 1 or 5, a language. If the candidate has Grade XIII standing in a language he may take a free option as the third general course.

## (d) Two general examinations in Biology.

5. For information about the General Honours Course in Science for Teachers and the course of study leading to the Interim High School Assistant's Certificate, Type A, in Science at the Ontario College of Education see page 113.

6. When Biology is the minor associated with Chemistry as major, the minor consists of Biology 10 (General botany), 16 (Comparative vertebrate anatomy) or 17 (Invertebrate zoology), 21 (Plant physiology) or 26 (Animal physiology), and a fourth course in Biology selected after consultation with the department.

When Biology is the minor associated with Physics as major, the minor consists of Biology 10 (General botany), 16 (Comparative vertebrate anatomy) or 17 (Invertebrate zoology), 21 (Plant physiology) and 26 (Animal physiology).

When Biology is the minor associated with Psychology as major, the minor consists of four courses, including Biology 16 (Comparative vertebrate anatomy), 26 (Animal physiology) and 45 (Evolution and genetics).

## COURSES OF INSTRUCTION

## BIOLOGY 1. GENERAL BIOLOGY.

A scientific study of plants and animals. The subject is treated in a comprehensive way with emphasis upon generalizations and principles. **Laboratory study of examples.**

Text-book: Mavor, *General Biology* (Macmillan).

LECTURES—Monday, Wednesday, Friday at 8.

LABORATORY—Monday or Wednesday, 1.30 - 3.30.

Professor Earl.

## BIOLOGY 10. GENERAL BOTANY.

The fundamental facts and principles of plant life. A careful study of form, structure and reproduction of representatives of the principal groups. Attention is given to life processes, particularly in the higher plants.

Prerequisite: Biology 1.

Text-book: Fuller and Tippe, *College Botany* (Holt).

LECTURES—Tuesday and Thursday at 9.

LABORATORY—Tuesday, 1.30 - 4.30.

Professor Krotkov.

## BIOLOGY 11. PHANEROGAMIC BOTANY.

Taxonomy, morphology, life histories and evolution of seed plants. Special attention is given to representatives of the local flora.

Prerequisite: Biology 10.

Text-book: McLean and Ivemy-Cook, *Textbook of Theoretical Botany* (Longmans, Green).

LECTURES—Tuesday and Thursday at 11.

LABORATORY—Thursday, 1.30 - 4.30.

Offered in 1952 - 53.

Professor Earl.

## BIOLOGY 12. CRYPTOGAMIC BOTANY.

The lower plants treated as described for the seed plants in Biology 11.

Prerequisite: Biology 10.

Text-book: Smith, *Cryptogamic Botany* (McGraw-Hill).

Offered in 1953 - 54, but not in 1952 - 53.

Professor Good.

## BIOLOGY 13. PLANT PATHOLOGY.

A study of representative bacterial, fungus, and virus diseases of plants, with emphasis on host-parasite relations, and the influence of environment on disease development.

Prerequisite: Biology 10.

Text-book: Heald, *Introduction to Plant Pathology* (McGraw-Hill).

LECTURES—Tuesday and Thursday at 11.

LABORATORY—Hours to be arranged.

Offered in 1952 - 53.

Professor Good.

## BIOLOGY 16. COMPARATIVE VERTEBRATE ANATOMY.

This course deals with the comparative anatomy and development of the various systems in the vertebrate animals, with special attention to the study of mammalian anatomy.

Prerequisite: Biology 1.

Text-books: Rand, *The Chordates* (Blakiston). Breland, *Manual of Comparative Anatomy* (McGraw-Hill).

LECTURES—Tuesday and Thursday at 10.

LABORATORY—Monday or Wednesday, 1.30 - 4.30.

## BIOLOGY 17. INVERTEBRATE ZOOLOGY.

A survey of representatives of the more important groups of invertebrates with reference to anatomy, taxonomy and life histories. Particular emphasis is given to phylogeny, and attention is directed to those forms which are of importance to man.

Prerequisite: Biology 1, or equivalent.

Text-books: Bullough, *Practical Invertebrate Anatomy* (Macmillan). Buchsbaum, *Animals Without Backbone* (Penguin).

LECTURES—Tuesday and Thursday at 11.

LABORATORY—Wednesday, 1.30 - 4.30.

Professor West.

## BIOLOGY 18. ENTOMOLOGY.

A survey of insects; morphology and internal anatomy, physiology and ecology, life history, habits and control of representatives of the more important orders and families. Particular emphasis is given to structure in relation to function and to the relation of the organism to its environment.

Prerequisite: Biology 17 (Grade B).

May be limited to honours students in Biology.

Text-books: Essig, *College Entomology* (Macmillan). Ross, *A Text-book of Entomology* (Wiley). Metcalf & Metcalf, *A Key to the Principal Orders and Families of Insects*.

LECTURES—Tuesday and Thursday at 10.

LABORATORY—Tuesday, 1.30 - 4.30.

Professor West.

## BIOLOGY 19. ECONOMIC VERTEBRATE ZOOLOGY.

A study is made of the more important vertebrate animals from an economic aspect such as commercial and game fishes, migratory waterfowl and game birds, significant fur-bearing animals. Emphasis is placed on conservation methods.

Prerequisite: Biology 16 (Grade B).

May be limited to honours students.

LECTURES—Monday and Wednesday at 9.

LABORATORY—Friday, 1.30-4.30.

Professor Curran.

## BIOLOGY 20. HISTOLOGY AND EMBRYOLOGY.

The course is taken with the students in the Faculty of Medicine.

The course combines a study in microscopy of the principal tissues and organs of the adult, with a study of the origin and development of those structures. Embryological changes from fertilization through cleavage and organogeny to establishment of the vertebrate and mammalian body form are considered in detail. Study material consists of fresh preparations and prepared slides.

Prerequisite: Biology 16 (Grade B).

Text-books: Ham, *Histology*. Maximow and Bloom, *Textbook of Histology*. Patten, *Human Embryology*. Hamilton, Boyd and Mossman, *Human Embryology*. Huettner, *Fundamentals of Comparative Embryology of the Vertebrates*.

LECTURES—Monday at 10, Tuesday and Wednesday at 11.

LABORATORY—Tuesday 9-11 and Thursday 10-12, or  
Wednesday and Friday 9-11.

Professor Kropp.

## BIOLOGY 21. PLANT PHYSIOLOGY.

A general study of the following topics: carbon and nitrogen metabolism, respiration, nutrition, permeability, water-relations and growth.

Prerequisites: Biology 10, Chemistry 12.

Text-book: Meyer and Anderson, *Plant Physiology* (Van Nostrand).

LECTURES—Tuesday and Thursday at 8.

LABORATORY—Hours to be arranged.

Professor Krotkov.



## BIOLOGY 26. ANIMAL PHYSIOLOGY.

This course covers, in a general way, the physiology of circulation, respiration, metabolism, digestion, excretion, endocrine secretion, and the central nervous system. Consideration is given to the structure of organs and systems, and to biochemical processes as well as physiological function. Special emphasis is placed on the mechanisms involved in each case, and on their integration in the organism as a whole.

In the laboratory the student carries out exercises on surviving tissues and on mammals, which illustrate the principles discussed in the lectures. These exercises are supplemented by demonstrations and films.

Text-book: Zoethout and Tuttle, *Text-book of Physiology*, 10th Edition (The C. V. Mosby Co.).

LECTURES—*Tuesday and Thursday at 11.*

LABORATORY—*Thursday or Friday, 1.30 - 4.30.*

Professor Sawyer.

BIOLOGY 27. ANIMAL PHYSIOLOGY (*Medical*).

The course is taken with the students in the Faculty of Medicine and lasts for thirty weeks.

*Experimental Physiology.* A laboratory course is given in the dynamics of muscle and nerve, the nervous system, circulation, respiration, digestion, secretion, excretion, etc.

*Physiology.* The subject is treated systematically and the lecture course is supplemented by demonstrations and by the work in the experimental class. Special emphasis is laid on the application of Physiology to clinical study.

Prerequisites: Biology 16, Biology 20. The student must have taken, or be taking concurrently, Biochemistry 18.

Text-books: Bard, *McLeod's Physiology in Modern Medicine*. Best and Taylor, *Physiological Basis of the Practice of Medicine*.

LECTURES—*Monday at 10; Tuesday, 9; Thursday, 9; Friday, 10.*

LABORATORY—*Monday or Tuesday, 1.30 - 5.30.*

Professors Ettinger and Sawyer.

## BIOLOGY 31. PLANT ECOLOGY.

A study of the origin and development of plant associations in relation to environment. The relations of plants to latitude, alti-

tude, climate, and other distributive factors. Ecological anatomy. Laboratory and field work.

Prerequisite: Biology 10.

Text-books: Weaver and Clements, *Plant Ecology*, 2nd edition (McGraw-Hill). James, *Outline of Geography* (Ginn).

LECTURES—Tuesday and Thursday at 11.

LABORATORY—Thursday, 1.30 - 4.30.

Not offered in 1952-53.

Professor Earl.

#### BIOLOGY 45. EVOLUTION AND GENETICS.

A consideration of data and concepts of organic evolution; the principles of genetics; exercises on variation and heredity in plants and animals.

Text-book: Sinnott, Dunn, Dobzhansky, *Principles of Genetics* (McGraw-Hill).

LECTURES—Monday, Wednesday, Friday at 11.

Professor Earl.

#### READING COURSES IN BIOLOGY:

##### R 1. BIOLOGICAL THEORIES.

Shull, *Evolution* (McGraw-Hill). Darwin, *On the Origin of Species*. Singer, *A Short History of Biology* (Oxford). Bertalanffy and Woodger, *Modern Theories of Development* (Oxford). Knobloch, *Readings in Biological Science* (Appleton, Century Crofts).

Professor Earl.

##### R 2. GENERAL PHYSIOLOGY.

L. V. Heilbrun, *An Outline of General Physiology* (Saunders Co.). B. T. Scheer, *Comparative Physiology* (John Wiley and Sons). N. A. Maximov, *Plant Physiology* (McGraw-Hill).

Professor Krotkov.

##### R 3. BIOLOGICAL AGGREGATIONS.

Pearse, *Animal Ecology* (McGraw-Hill). W. C. Allee, *Animal Life and Social Growth* (Williams and Wilkins). Elton, *Animal Ecology* (Macmillan). Wheeler, *Social Life among the Insects* (Harcourt, Brace and Co.). Trippensee, *Wild-life Management* (McGraw-Hill). Vogt, *Road to Survival* (Sloane).

## R 4. ADVANCED ENTOMOLOGY.

A list of reading material may be obtained from the instructor. With the approval of the department this course may be substituted for R 3.

Professor West.

With the consent of the department, a thesis may be substituted for either R 2 or R 3 but not for R 1. Application for permission to do this must be made to the department within two weeks of the opening of the fall term.

## GRADUATE COURSES

For information about graduate courses in Biology, see the Calendar of Graduate Studies.

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CHEMISTRY

J. A. McRae, M.A., Ph.D., F.R.I.C., F.R.S.C., PROFESSOR

G. B. Frost, B.A., Ph.D., PROFESSOR

L. A. Munro, M.A., Ph.D., F.R.S.C., F.C.I.C., PROFESSOR

R. L. Dorrance, M.A., ASSOCIATE PROFESSOR

W. M. Smith, B.Sc., Ph.D., ASSOCIATE PROFESSOR

R. Y. Moir, M.A., Ph.D., ASSISTANT PROFESSOR

R. N. Clayton, B.Sc., C.I.L. FELLOW

J. A. Stewart, B.A., MILTON HERSEY FELLOW

R. B. Smyth, B.Sc., WILLIAM NEISH FELLOW

F. H. Sexsmith, B.A., REUBEN WELLS LEONARD FELLOW

## REGULATIONS AND ANNOUNCEMENTS

1. Grade XIII standing in Chemistry or Chemistry 1 is required for admission to Chemistry 2, and Chemistry 2 is prerequisite to all other courses in Chemistry. Candidates should not attempt Chemistry 1 unless they have taken Junior Matriculation Chemistry.

2. Candidates offering Chemistry as one of the subjects of concentration on the Pass Course take Chemistry 1 (General chemistry), 2 (General chemistry), 11 (Analytical chemistry), if they have not included Chemistry in their Grade XIII programme; Chemistry 2, 11, 12 (Organic chemistry), if they have offered Chemistry of Grade XIII as one of the subjects for admission. Pass candidates

are not ordinarily admitted to honours courses other than Chemistry 11 and 12 but exceptions may be made if they have satisfactory standing in Chemistry 2, 11 and 12.

### 3. The Honours Course in Chemistry.

Candidates planning to take the Honours Course in Chemistry are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), Chemistry, a language and a fifth subject which should be Physics. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

#### (a) The Major.

For students registered in honours prior to the session of 1950-51 the prescription for the honours major in the 1949-50 calendar will apply.

The major is made up as follows:

Chemistry 2 (General chemistry)  
Chemistry 11 (Analytical chemistry)  
Chemistry 12 (Organic chemistry)  
Chemistry 13 (Quantitative analysis)  
Chemistry 14 (Physical chemistry)  
Chemistry 22 (Advanced organic chemistry)  
Chemistry 24 (Advanced physical chemistry), or  
Chemistry 25 (Electrochemistry)  
One of Chemistry 17 (Industrial chemistry),  
Chemistry 15a (Colloid chemistry), 21b (Surface chemistry)  
the one of Chemistry 24, 25 not already chosen  
Mathematics 2 (Differential and integral calculus)  
Chemistry Reading Course 1 (Inorganic chemistry) and  
one additional reading course  
Biochemistry 16 (Introduction to biochemistry) or  
Biochemistry 18 (Animal biochemistry) may be substituted for Chemistry 17

#### (b) The Minor.

The minor may be:

Physics 2, 11, 13b, 14a, Mathematics 10a, 11b or 13. If Physics has not been included in the Grade XIII programme the candidate must complete Physics 1 before registering in Physics 2, or



Biology 10, 16, 21 or 26, a fourth course in Biology selected after consultation with the department of Biology, and Physics 1 unless Physics has been taken as one of the subjects of Grade XIII, or

Geology 1, 2, 11, 14, 12 or 10a and 13b.

- (c) Compulsory general courses to complete the work for degree.

With Physics or Biology as minor: English 2, Philosophy 1 or 5, a language. If the candidate has Grade XIII standing in a language he may take an option in place of the third general course.

With the Geological Sciences as minor: English 2, Philosophy 1 or 5.

- (d) Two general examinations in Chemistry.

4. When Chemistry is the minor associated with Biology as major, the minor consists of Chemistry 2 (General chemistry), 12 (Organic chemistry), Biochemistry 16 (Introduction to biochemistry), and Physics 1 (Mechanics, properties of matter, heat, wave-motion, sound, light, electricity, and magnetism) unless Physics has been offered as a subject of Grade XIII.

When Chemistry is the minor associated with the Geological Sciences as major, the minor consists of Chemistry 2, 11, 13, 14.

5. Students taking Honours in Chemistry must consult the Head of the Department after they have passed Chemistry 2.

6. For information about the General Honours Course in Science for Teachers and the course of study leading to the Interim High School Assistant's Certificate, Type A, in Science at the Ontario College of Education, see page 113.

7. For information in regard to scholarships in Chemistry, see pages 78 and 79.

8. Students taking Chemistry as the major are advised to include German in their Course. This is of particular importance to those who plan to proceed to graduate work.

#### COURSES OF INSTRUCTION

##### CHEMISTRY 1. GENERAL CHEMISTRY.

The student entering on this course should already have passed Junior Matriculation Chemistry.

The fundamental theories, laws and principles of chemistry are discussed and applied in the study of the principal non-metals and some of the more important metals and their compounds.

Text-books to be announced.

LECTURES—*Tuesday, Thursday, Saturday at 10.*

LABORATORY—*Monday, 1.30 - 3.30.*

## CHEMISTRY 2. GENERAL CHEMISTRY.

A more detailed and advanced course in general chemistry than Chemistry 1. It will be open only to those who have passed Chemistry 1 or who have standing in Upper School Chemistry or its equivalent.

The laws and theories of chemistry with particular attention to both their qualitative and quantitative applications. The chemistry of the principal non-metals and metals and their more important classes of compounds. In the laboratory numerous illustrative quantitative and qualitative exercises will be performed. The student will be expected to work each week a set of assigned problems.

Text-books: Sisler, Vander Werf, Davidson, *General Chemistry* (Macmillan); Morton, Clippenger, Eblen, *A Laboratory Program for General Chemistry* (Houghton-Mifflin); Dorrance, *Experiments and Problems in General Chemistry* (Technical Supplies).

LECTURES—*Monday, Wednesday, Friday at 10.*

LABORATORY—*Thursday, 1.30 - 3.30.*

Professor Smith.

## CHEMISTRY 11. ANALYTICAL CHEMISTRY.

Open to pass students who have passed Chemistry 2.

Qualitative Analysis. The lectures deal with the chemistry of the metals and the theory of qualitative analysis. The laboratory work consists of the systematic analysis for basic and acid ions leading to the analysis of selected industrial products.

Text: Curtman, *Semimicro Qualitative Analysis* (Macmillan).  
Reference Texts: Treadwell and Hall, *Analytical Chemistry*, Vol. I (Wiley); Engelder, *Calculations of Qualitative Analysis* (Wiley).

LECTURE—*Tuesday, 11 - 12.*

LABORATORY—*Wednesday, 1.30 - 4.30.*

Professor Munro.

Quantitative Analysis. An elementary course designed to illustrate the fundamental procedures in gravimetric and volumetric analysis.

Text: Dorrance, *Procedures and Problems in Quantitative Analysis* (Technical Supplies).

LECTURE—*Thursday*, 11 - 12.

LABORATORY—*Thursday*, 1.30 - 4.30.

Professor Dorrance.

## CHEMISTRY 12. ORGANIC CHEMISTRY.

Students in Biology or Biochemistry taking Chemistry as minor may take Chemistry 11 and 12 in the same year.

An introductory course on the chemistry of the compounds of carbon. The principal classes of aliphatic and aromatic compounds are studied to illustrate both their theoretical and practical importance. In the laboratory a number of organic compounds is prepared to illustrate typical operations employed in organic chemistry.

Prerequisite: Chemistry 2 with a minimum of 62%, or Chemistry 2 and 11.

Text: Lecture text-book to be announced. Adams and Johnson, *Laboratory Experiments in Organic Chemistry* (Macmillan), 4th Edition.

LECTURES—*Wednesday and Friday* at 11.

LABORATORY—*Monday* 1.30 - 4.30, or *Tuesday* 1.30 - 4.30, or  
*Friday* 1.30 - 4.30.

Professor McRae.

## CHEMISTRY 13. QUANTITATIVE ANALYSIS—Honours Course.

An extended course in Quantitative Analysis.

Pass students may take Chemistry 13 if they have at least 62% in Chemistry 11.

LECTURES—*Monday* 8 - 9.

LABORATORY—6 hours per week to be arranged.

Professors Dorrance and Smith.

## CHEMISTRY 14. PHYSICAL CHEMISTRY.

The ideal gas law; actual gases and equations of state; the liquid state and vapor pressure; the ideal solution; deviations from ideality, azeotropes, fractionation; dilute solutions; the nature of ionic crystals and electrolytic solutions; thermodynamic functions, energy, enthalpy, entropy and free energy; the equilibrium constant; heterogeneous equilibria; rates of chemical processes.

Prerequisites: Chemistry 1, 2, 11, 13 and Mathematics 2.  
Chemistry 13 and 14 may be taken in the same year.

Text: Glasstone, *Elements of Physical Chemistry* (Van Nostrand).

LECTURES—Tuesday and Thursday at 9.

LABORATORY—Tuesday, 1.30 - 4.30.

Professor Frost.

## CHEMISTRY 15a. COLLOID CHEMISTRY.

The lectures deal with the general properties of colloids. The laboratory work is illustrative of the topics dealt with in lectures and includes experiments on colloidal preparations, dialysis, pore size of membranes, relative and intrinsic viscosity, surface tension, molecular films, electrical properties, adsorption, foams, emulsions, gels, etc.

Prerequisites: Physics 1 and Chemistry 1, 2, 11, 12, 13, and 14.

Text: Hartman, *Colloid Chemistry* (Houghton-Mifflin).

Reference texts: Alexander, *Colloid Chemistry*, Vols. I-VII (Chem. Catalogue Co.); Lewis, Squires and Broughton, *Colloidal and Amorphous Materials* (Macmillan).

LECTURES—Wednesday and Friday at 10, first term.

LABORATORY—Tuesday, 1.30 - 4.30.

Professor Munro.

## CHEMISTRY 17. INDUSTRIAL CHEMISTRY.

The lectures deal with the following topics: the characteristics and production of solid, liquid, and gaseous fuels; water purification and treatment; the petroleum industry; sulphuric, nitric, and hydrochloric acids; fertilizers; alkali; artificial fibres and the manufacture of wood pulp and paper.

In the laboratory the following processes are carried out: the catalytic production of sulphuric acid, nitric acid and formaldehyde; the determination of the composition and calorific value



of fuels; water treatment and analysis and gas analysis. Emphasis is laid on the systematic recording and interpreting of results throughout the course.

Prerequisites: Chemistry 1, 2, 11, 12, 13 and Physics 1.

Chemistry 17 and 12 or 13 or both may be taken in the same year.

Text: Shreve, *Chemical Process Industries* (McGraw-Hill).

LECTURES—Tuesday and Thursday at 10, in Gordon Hall.

LABORATORY—Monday, 1.30 - 4.30, in Gordon Hall.

(Department of Chemical Engineering)

#### CHEMISTRY 21b. SURFACE CHEMISTRY.

This course is designed to continue the work begun in Course 15a. It is devoted to the study of polymerization, gels, thermoplastic and thermo-setting resins, ion exchange, elastomers, sorption, and catalysis.

Prerequisite: Chemistry 15a.

Texts: Powers, *Synthetic Resins and Rubbers* (Wiley); Griffith, *The Mechanism of Contact Catalysis* (Oxford University Press); Gregg, *Adsorption* (Methuen and Co.).

Reference Texts: *Modern Plastics Encyclopedia* (Plastics Corp.); Berkman, Morell and Egloff, *Catalysis* (Reinhold Corp.); *Advances in Colloid Science* (Interscience).

LECTURES—Monday, Wednesday, Friday at 11.

Professor Munro.

#### CHEMISTRY 22. ADVANCED ORGANIC CHEMISTRY.

The principal reactions used in synthetic organic chemistry with practical illustrations in the laboratory. The more detailed chemistry of the aliphatic and aromatic series and of the simpler types of heterocyclic compounds. Laboratory practice in qualitative and quantitative organic chemistry and organic preparations.

Prerequisites: Chemistry 1, 2, 11, 12, 13, 14, but Chemistry 22 and Chemistry 14 may be taken in the same year.

Texts: Fieser and Fieser, *Organic Chemistry* (Heath); Conant and Blatt, *The Chemistry of Carbon Compounds* (Wiley); Adams and Johnson, *Laboratory Experiments in Organic Chemistry* (Macmillan).

Books of References: Whitmore, *Organic Chemistry* (Van Nostrand); Karrer, *Organic Chemistry*; Gilman, *Organic Chemistry* (Wiley); Gattermann-Wieland, *Laboratory Methods of Organic Chemistry* (Macmillan).

LECTURES—Tuesday and Thursday at 11.

LABORATORY—Monday 1.30-4.30, or Tuesday 1.30-4.30, or Friday 1.30-4.30, or Saturday 9-12.

Professor McRae.

#### CHEMISTRY 24. ADVANCED PHYSICAL CHEMISTRY.

The greater part of this course is taken up with a detailed treatment of the principles of chemical thermodynamics and their application to the chemical processes. Some consideration, however, is given to the kinetic approach to chemical phenomena, and to molecular structure. The laboratory work consists of equilibrium and rate studies. Several laboratory periods are used for the mathematical computation of fugacities, activities, and free energies, and for the thermodynamic calculation of yields in industrial processes.

Prerequisites: Chemistry 1, 2, 11, 12, 13, 14.

Text: Glasstone, *Thermodynamics* (Van Nostrand).

LECTURES—Tuesday and Thursday at 10.

LABORATORY—Thursday, 1.30-4.30.

Professor Frost.

#### CHEMISTRY 25. ELECTROCHEMISTRY.

A discussion of the fundamentals of electrochemistry and their application to chemical analysis.

The laboratory work includes electrolytic preparations, electrical measurements of the properties of solutions and electrometric titrations.

Prerequisites: Chemistry 1, 2, 11, 12, 13, 14.

Texts: Glasstone, *Introduction to Electrochemistry* (Van Nostrand).

LECTURES—Monday at 10, Tuesday at 8 (first term); Thursday at 8 (second term).

LABORATORY—Wednesday, 1.30-4.30.

Professor Smith.

## READING COURSES IN CHEMISTRY.

## R 1. INORGANIC CHEMISTRY.

Partington, *Text-book of Inorganic Chemistry* (Macmillan).

Professor Smith.

## R 2. CHEMICAL CALCULATIONS.

Students taking this course should consult the instructor for assignment of books.

This course presupposes that the student has passed Mathematics 2.

Professor Dorrance.

## R 3. HISTORY OF CHEMISTRY.

A course of selected reading in the history of chemistry, and the development of chemical theory. Students should consult the instructor for assignment of books and journal articles.

Professor Frost.

## R 5. INDUSTRIAL CHEMISTRY.

(Only for students not taking Chemistry 17. R 5 and Chemistry 17 may not be counted towards the major in Chemistry.)

Text: Shreve, *Chemical Process Industries*.

Professor McRae.

## GRADUATE COURSES

For information about graduate courses in Chemistry, see the Calendar of Graduate Studies.

## CLASSICS

H. L. Tracy, B.A., Ph.D., PROFESSOR OF CLASSICS

S. E. Smethurst, M.A., PROFESSOR OF CLASSICS

Mary L. Macdonnell, M.A., ASSISTANT PROFESSOR OF CLASSICS

Kenneth Thompson, TUTOR IN CLASSICS, Session 1951-52.

## CLASSICAL LITERATURE

## COURSES OF INSTRUCTION

## CLASSICAL LITERATURE 1.

A general course open to those who wish to study in English translations the literature of Greece and Rome.

## Prescribed Texts:

1. Homer, *Iliad* and *Odyssey*, E. V. Rieu (Penguin Books).
2. *Fifteen Greek Plays*, Cooper (Oxford University Press).

## Reference Books:

1. Mythology: Bianchi, *The Mythology of Greece and Rome*; Bullfinch, *Mythology*.
2. Epic: Vergil, *Aeneid*, Mackail.
3. Drama: Plautus (Loeb, vol. 2).
4. Satire: Herodas, Juvenal (Loeb).
5. Romance: Longus, *Achilles Tatius* (Loeb).
6. Biography: *Socratic discourses* (Everyman); Plutarch, *Lives* (Everyman, vol. 3); Suetonius (Loeb).
7. Literary Criticism: Horace, *Satires*, etc. (Loeb); *Aristotle on the Art of Poetry*, Cooper (Harcourt, Brace and Co.).
8. General: *History of Ancient Greek Literature*, Murray; *Latin Literature*, Mackail.

Reference books are available to extramural students through the university library.

Tuesday, Thursday, Saturday at 9.

Professor Tracy.

For information in regard to scholarships, see page 68.

## GREEK LANGUAGE AND LITERATURE

## GENERAL NOTICE

Liddell and Scott's *Greek Dictionary* (abridged edition) is recommended. A *Greek Grammar*, preferably that of Goodwin and Gulick, or Smyth, is necessary.

## REGULATIONS AND ANNOUNCEMENTS

1. Greek A may be counted towards a degree under conditions specified in sections 10 and 11, GENERAL REGULATIONS. Under these regulations students who enter the University without matriculation in Greek, and who wish to specialize in this subject, may complete their programme of work in the usual time.

2. Students offering Greek as one of the subjects of concentration on the Pass Course will take either (α) Greek A (For beginners), 1 (Translation and prose composition) and 2 (Translation and prose



composition), or Greek 1, 2 and one of Greek 10 (Epic poetry, oratory), 11 (Historians, comedy), or (b) courses in classical civilization, three of Classical Literature 1 (A study of the literature of Greece and Rome in English translations), Greek and Roman History 4 (A survey of Greek and Roman society), 51 (Advanced Greek and Roman history), History 12 (Mediæval Europe, 400-1453).

### 3. The Honours Course in Greek.

Candidates planning to take the Honours Course in Greek are advised to offer Grade XIII subjects as follows: English, Latin, Greek, a science, and a fifth subject which may be a third language, a second science or History. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include any subjects that they lack.

#### (a) The Major.

The major is made up as follows:

Greek 2 (Translation and prose composition)

Greek 10 (Epic poetry, oratory)

Greek 11 (Historians, comedy)

Greek 21 (Tragedy, minor dialogues of Plato)

Greek 26 (History of ancient philosophy)

Greek and Roman History 4 (A survey of Greek and Roman society)

With Latin 12 (Vergil) and Greek and Roman History 51 (Advanced Greek and Roman history) if Latin is the minor; Latin 2 (Translation and prose composition) and Politics 2 (Introduction to government and politics) if Philosophy is the minor

Classics Reading Course 1 (Greek and Roman literature, and topics selected from religion, art, social life), and

Classics Reading Course 2 (Life and letters in the Early Empire) or

Classics Reading Course 3 (Classical tragedy), and

Classics Reading Course 4 (The Odyssey of Homer)

Greek 2 and 10 (or 11) should be taken in the same session. Classics Reading Course 1 should be taken as the first reading course, and as early as possible.

## (b) The Minor.

The minor may be:

Latin 2, 12 or 13, 20, and 30, or  
Philosophy 1, 10, 27 and two advanced courses. (See  
page 205, section 6.)

In consultation with the Department of Classics a candidate may take the minor in some other subject.

## (c) Compulsory general courses to complete the work for the degree:

With Latin as minor: English 2, Philosophy 1, a science. If the candidate has Grade XIII standing in a science he may take a free option as the third general course.

With Philosophy as minor: English 2, a science. If the candidate has Grade XIII standing in a science he may take a free option as the second general course.

## (d) Two general examinations in Greek.

4. A minor in Greek normally consists of Greek 2 (Translation and prose composition), 10 (Epic poetry, oratory), 11 (Historians, comedy), and 21 (Tragedy, minor dialogues of Plato) or, when Latin is not the major, Greek and Roman History 4 (A survey of Greek and Roman society).

## 5. High School Teaching Certificate in Classics.

Candidates for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, in Classics at the Ontario College of Education take the regular Honours degree Course in Latin and Greek, or Greek and Latin.

6. For information in regard to scholarships in Greek see page 68.

## COURSES OF INSTRUCTION

## GREEK A. FOR BEGINNERS.

Texts: *A New Introduction to Greek*, Alston Chase and Henry Philips, Jr. (Tech. Supplies); *Greek Grammar*, Goodwin and Gulick (Ginn).

Monday at 1.30. Tuesday, Thursday, Saturday at 9.

Professor Macdonnell.

## GREEK 1. TRANSLATION AND PROSE COMPOSITION.

Texts: *Greek Reader*, Freeman and Lowe (Oxford, Clarendon Press); *The Acts of the Apostles*, Page (Macmillan); *Greek Prose Composition*, North and Hillard (Rivington's).

Monday, Wednesday, Friday at 11.

Professor Smethurst

## GREEK 2. TRANSLATION AND PROSE COMPOSITION.

Texts: Euripides, *Alcestis*, Earle (Macmillan); Plato, *Apology*, Stock (Oxford, Clarendon Press); *The Acts of the Apostles*, Page (Macmillan).

Hours to be arranged.

Professor Tracy

## GREEK 10. EPIC POETRY, ORATORY.

Texts: Demosthenes, *Olynthiacs*, Abbott and Matheson (Oxford, Clarendon Press); Lysias, *XVI Orations*, Shuckburgh (Macmillan); *Isocrates* (text to be arranged); Homer, *Iliad I-XII*, Merry (Oxford, Clarendon Press); *Greek Grammar*, Goodwin and Gulick (Ginn).

Hours to be arranged.

## GREEK 11. HISTORIANS, COMEDY.

Texts: Thucydides, Books I and II, Marchant (Macmillan); Aristophanes, *Acharnians*, and *Clouds*, Merry (Oxford, Clarendon Press).

Not offered in 1952 - 53.

## GREEK 21. TRAGEDY, MINOR DIALOGUES OF PLATO.

Texts: Sophocles, *Antigone*, Jebb (abridged edition; Cambridge, Pitt Press). A prescription of reading from Plato will be arranged.

Hours to be arranged.

## GREEK 26.

A history of ancient philosophy and the development of modern thought. This course is for the current session the same as Philosophy 12 and will be given by the Department of Philosophy.

Prerequisite: Philosophy 1.

## READING COURSES IN CLASSICS

Students are urged to cover as much as possible of their reading courses during the long vacation.

R 1. GREEK AND ROMAN LITERATURE, AND TOPICS SELECTED FROM RELIGION, ART, SOCIAL LIFE.

All students must prepare themselves in Greek and Latin Literature. One or two additional topics are to be chosen. A full bibliography cannot be given here. The basic books in the various fields are listed; others will be recommended to students when they have chosen their special topics. Literature: Croiset, *Abridged History of Greek Literature*; Mackail, *Latin Literature*. Religion: Moore, *The Religious Thought of the Greeks*; Bailey, *Phases in the Religion of Ancient Rome*. Art: P. Gardner, *Principles of Greek Art*; Walters, *The Art of the Romans*. Social Life: Glotz, *Ancient Greece at Work*; Warde Fowler, *Social Life at Rome*.

R 2. LIFE AND LETTERS IN THE EARLY EMPIRE.

Tacitus, *Annals*, XIII, XIV (Furneaux, Oxford University Press); Juvenal, *Satires*, 1, 3, 5, 7; Pliny's Letters, in *Selected Letters of Pliny*, Pritchard and Bernard (Oxford, Clarendon Press).

The above are to be supplemented by readings in the following books: Capes, *The Early Empire*; Dill, *Roman Society from Nero to Marcus Aurelius*.

R 3. CLASSICAL TRAGEDY.

Aeschylus, *Agamemnon*; Sophocles, \**Oedipus Tyrannus*; Euripides, *Hippolytus*, \**Medea*; Seneca, *Oedipus*, *Phaedra*; Corneille, *Médée* or *Oedipe*; Racine, *Andromaque*, *Phèdre*; Voltaire, *Oedipe*, *Oreste*; Dryden, *Oedipus*.

Sheppard, *Greek Tragedy*; Murray, *Ancient Greek Literature*; Lucas, *Seneca and Elizabethan Tragedy*; Wright, *French Classicism*; de Julleville, *Le Théâtre en France*; Faquet, *Propos de Théâtre*, essays on Racine in vols. 1 and 3; Vaughan, *Types of Tragic Drama*; Lucas, *Tragedy*; Nettleton, *English Drama of the Restoration and Eighteenth Century*; Cambridge *History of English Literature*, vol. VIII, the relevant chapters.

Classics students will read the plays marked \* in Greek. Latin-French students will select for reading in the original any two of the French plays listed above. The remainder, in each case, will be studied in translations.



## R 4. THE ODYSSEY OF HOMER.

Homer, *Odyssey*, ed. W. W. Merry (2 vols., Oxford, Clarendon Press); Victor Bérard, *Did Homer Live?*; R. C. Jebb, *Homer: An Introduction to the Iliad and the Odyssey*; T. D. Seymour, *Life in the Homeric Age*.

## GREEK AND ROMAN HISTORY

## COURSES OF INSTRUCTION

## GREEK AND ROMAN HISTORY 4. A SURVEY OF GREEK AND ROMAN SOCIETY.

An introductory account of Greek and Roman political and social development; the period from the rise of the Greek city-states to the death of Augustus will be studied and the student will be expected to pay particular attention to those aspects of Greek and Roman society which are most important for an appreciation of modern ideas and institutions.

Texts: Trever, *History of Ancient Civilization*, 2 vols. (Harcourt, Brace); Thucydides, *History of the Peloponnesian War* (Everyman).

Certain other works dealing with special problems or aspects of Greek and Roman History will be available to extramural students through the lending facilities of the university library.

Tuesday, Thursday, Saturday at 11.

Professor Smethurst.

## GREEK AND ROMAN HISTORY 51. ADVANCED GREEK AND ROMAN HISTORY.

Advanced study of certain problems in Greek and Roman History, such as the growth of the city-state, the development of Athenian democracy, the rise of federalism, the collapse of the Roman Republic. The course will be adapted as far as possible to suit the interests of individual students.

Prerequisite: Greek and Roman History 4.

Professor Smethurst.

For information in regard to scholarships in Greek and Roman History, see page 68.

## LATIN LANGUAGE AND LITERATURE

### GENERAL NOTICE

For the pass classes, Lewis' *Latin Dictionary for Schools* (Oxford University Press) is recommended, or Lewis' *Elementary Latin Dictionary* (Oxford University Press). Honours students must provide themselves with Lewis and Short's *Latin Dictionary* (Oxford University Press), and Allen and Greenough's *New Latin Grammar* (Ginn and Co.).

### REGULATIONS AND ANNOUNCEMENTS

1. Latin 1 is prerequisite to all other courses in Latin.

2. A student offering Latin as one of the subjects of concentration on the Pass Course will take either (a) Latin 2 (Translation and prose composition), 12 (Vergil) and 13 (Poets of the Golden Age), or (b) courses in classical civilization, three of Classical Literature 1 (A study in English translations of the literature of Greece and Rome), Greek and Roman History 4 (A survey of Greek and Roman society), 51 (Advanced Greek and Roman history), History 12 (Mediaeval Europe, 400-1453).

3. The Honours Course in Latin.

Candidates planning to take the Honours Course in Latin are advised to offer Grade XIII subjects as follows: English, Latin, a science, a second language and a fifth subject which may be a third language, a second science or History. Candidates who cannot offer the above programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

(a) The Major.

The major is made up as follows:

- Latin 2 (Translation and prose composition)
- Latin 12 (Vergil)
- Latin 13 (Poets of the Golden Age)
- Latin 20 (Roman Historians; Roman comedy)
- Latin 30 (Roman philosophy)
- Latin 31

When Greek is the minor, Greek and Roman History 4 (A survey of Greek and Roman society), and 51 (Advanced Greek and Roman history) must also be taken; when English is the minor, an honours course in History,

and one of French 2 (Second year French), German 2 (Intermediate German) are required; when French is the minor, an honours course in History, and an honours course in English are required.

Three reading courses: when Greek is the minor, any three; otherwise, Classics Reading Course 1 (Greek and Roman literature, and topics selected from religion, art, social life), Classics Reading Course 2 (Life and letters in the Early Empire) and Classics Reading Course 3 (Classical tragedy).

Latin 2 and 12 (or 13) should be taken in the same session. Classics Reading Course 1 should be taken as the first reading course, and as early as possible.

(b) The Minor.

The minor may be:

Greek 2, 10, 11, 21, or

French 2, 10, 11, 14, or

English 2 or 5, 10, any two chosen from 15, 19, 20, 22, or Philosophy 1, 10, 27 and two advanced courses. (See page 205 section 6.)

(c) Compulsory general courses to complete the work for degree:

With Greek or French as minor: English 2, Philosophy 1, a science. If the candidate has Grade XIII standing in a science he may take a free option as the third general course.

With English as minor: Philosophy 1, a science, a free option. If the candidate has Grade XIII standing in a science he may take a free option as the second general course.

With Philosophy as minor: English 2, a science. If the candidate has Grade XIII standing in a science he may take a free option as the second general course.

(d) Two general examinations in Latin.

4. A minor in Latin normally consists of Latin 2 (Translation and prose composition), 12 (Vergil) or 13 (Poets of the Golden Age), 20 (Roman historians; Roman comedy), and 30 (Roman philosophy).

5. Honours students continue throughout their courses the study of morphology, historical grammar, syntax, prosody and composition. These are part of the prescription for Latin 12, 13, 20, 30.

6. For information about courses of study leading to High School Teaching Certificates in Classics, Latin and English, Latin and French, see pages 111 and 112.

7. For information in regard to scholarships in Latin see see page 67.

#### COURSES OF INSTRUCTION

##### LATIN 1. TRANSLATION AND PROSE COMPOSITION.

Texts: *Latin Prose and Poetry*, Bonnie and Niddrie (Montreal, Ginn and Company); *Latin Prose Composition*, Tracy and Law (Clarke, Irwin and Co.)

A tutorial period will be given for the benefit of students who desire extra assistance.

Monday, Wednesday, Friday at 10.

Professor Smethurst.

##### LATIN 2. TRANSLATION AND PROSE COMPOSITION.

Texts: Vergil, *Aeneid*, Book VI, Sidgwick (Pitt Press); *A Book of Latin Verse* (School edition: Oxford University Press); Pliny, *Letters*, Book VI, Duff (Cambridge University Press).

Exercises in Latin prose composition will be assigned.

Extramural students should supply themselves with the *Classical Dictionary* in the Everyman series (J. M. Dent), and *Roman Literature*, Wilkins (Literature Primers: Macmillan).

Tuesday, Thursday, Saturday at 11.

Professor Tracy.

##### LATIN 12. VERGIL.

History of the Latin Epic. The *Aeneid*. Brief study of the *Eclogues* and *Georgics*.

*P. Vergili Maronis Opera*, Sidgwick (Cambridge University Press).

Not offered in 1952 - 53.

##### LATIN 13. POETS OF THE GOLDEN AGE. Catullus, Horace, Tibullus, Propertius.

Catullus, Merrill (Ginn and Co.); *Q. Horati Flacci Opera*, Page, Palmer and Wilkins (Macmillan).

Hours to be arranged.



LATIN 20. I. ROMAN HISTORIANS. Livy, Sallust, Cicero.

II. ROMAN COMEDY. Plautus, Terence.

*Selected Letters of Cicero*, Abbott (Ginn and Co.); Livy, Books XXX-XXXIII, Mendell (Appleton, Century); Sallust, ed. Capes (Clarendon Press); Plautus, *Mostellaria*, Fay (Allyn and Bacon); *The Comedies of Terence*, Ashmore (Oxford University Press).

Not offered in 1952-53.

LATIN 30. ROMAN PHILOSOPHY. Stoicism: Cicero, Juvenal, Seneca  
Epicureanism: Lucretius.

Cicero, *De Natura Deorum*, Plasberg (Teubner); Juvenal, *Satires*, Duff (Cambridge University Press); Seneca, *Select Letters*, Summers (Macmillan); Lucretius, *De Rerum Natura*, Books I, III, Duff (Cambridge University Press).

Hours to be arranged.

LATIN 31.

Intensive reading in an author chosen by the student, with consultations and research assignments.

## GRADUATE COURSES

For information about graduate courses in Classics, see the Calendar of Graduate Studies.

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## DRAMA

William Angus A.M., Ph.D., ASSOCIATE PROFESSOR AND  
DIRECTOR OF DRAMA

Margaret Angus, B.A., ASSISTANT

The course in Drama may count as an optional course towards the degree of Pass B.A. On recommendation of the departments concerned, students may apply to the Faculty of Arts for permission to combine courses in Fine Arts (Drama, Art, Music) to make up a group towards the degree of Pass B.A.

### DRAMA. THE THEATRE AS AN ART FORM.

Lectures on the arts and crafts of present-day play production, their theory and practice, and on the development of the theatre, supplemented by a study of plays representative of the historical periods. The laboratory work is devoted to the practical contributions made to the productions of the Drama Guild and the Secondary School Drama Festival.

Text-book: Eric Bentley, *The Play, A Critical Anthology* (New York: Prentice Hall); additional plays and further reading to be assigned.

*Monday, Wednesday, and Friday at 11.*

Laboratory — To be announced.

ECONOMICS, See POLITICAL AND ECONOMIC SCIENCE

## ENGLISH LANGUAGE AND LITERATURE

Henry Alexander, M.A., F.R.S.C., PROFESSOR

Charles J. Vincent, M.A., Ph.D., PROFESSOR

Malcolm M. Ross, M.A., Ph.D., PROFESSOR

E. A. Walker, M.A., ASSOCIATE PROFESSOR

Arnold Edinborough, M.C., M.A., ASSISTANT PROFESSOR

(on leave of absence, Session 1952 - 53)

George Whalley, M.A., Ph.D., ASSISTANT PROFESSOR

D. W. Cole, M.A., INSTRUCTOR

### REGULATIONS AND ANNOUNCEMENTS

1. English 2 (A general introduction to English literature) is required of all candidates for a pass degree.

2. English 2 (A general introduction to English literature) and two of 3 (The English novel), 5 (The Neo-Classical Age) and 7 (American and Canadian literature) are intended for students offering English as one of the subjects of concentration for the pass degree. Pass students are not ordinarily admitted to honours courses but exceptions may be made with the consent of the department. Pass students wishing to apply for admission to an Honours Course are advised to consult the head of the department before leaving the University in the previous summer.

3. Students who intend to enter the Honours Course in English and have at least second class honours in the Grade XIII examinations in English Literature and Composition shall take courses 2 or 5 (The Neo-Classical Age) and 10 (An introduction to honours in English) in their first year. They must obtain a standing of at least B in these courses if they wish to continue in honours work.

If students without the above-mentioned qualifications wish to enter on an Honours Course they shall take English 2 or 5, and if they obtain at least B on this course they may proceed in the second year to 10 (An introduction to honours in English) and 15 (Shakespeare and Elizabethan drama).

Honours students who do not take English 5 in their first year are advised to attend lectures in this course at some later period.

#### 4. The Honours Course in English.

Candidates planning to take the Honours Course in English are advised to offer Grade XIII subjects as follows: English, Latin, a science, a second language and either a third language or History. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

##### (a) The Major.

The major is made up as follows:

English 2 or 5

English 10 (An introduction to honours in English)

English 14 (Old and Middle English)

English 15 (Shakespeare and Elizabethan drama)

English 19 (English literature from 1500 to 1700)

English 20 (English literature from 1780 to 1880)

English 22 (English literature from 1880 to 1940)

With Latin 2 (Translation and prose composition) or Classical Literature 1 (The literature of Greece and Rome). Candidates for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, in English and French at the Ontario College of Education (see page 112) shall take Latin 2.

English Reading Course 1 (American and Canadian literature)

English Reading Course 2 (The Victorian age)

English Reading Course 3 (The English novel)

## (b) The Minor.

The minor may be:

History 3 or 5 or 6, 12, 13 or 19 and one other course numbered over 10. The minor in Social History required for the course leading to the Interim High School Teaching Certificate, Type A, in English at the Ontario College of Education is: History 3 or 5 or 6 and two courses to be selected from 14a, 16, 18a, 18b, 19, 24a, 24b, 28.

French 2, 10, 11, 14.

Latin 2, 12 or 13, 20, 30.

Greek 2, 10, 11, 21 or Greek and Roman History 51.

German 2, 10, 12 and 14.

Philosophy 1, 10, 27 and two advanced courses. (See page 205, section 6.)

Spanish 2, 10, 22 or 24, 29 or 30.

## (c) Compulsory general courses to complete the work for a degree:

With History or French or Latin or Greek or German or Spanish as minor: Philosophy 1, a science, a free option. If Grade XIII Latin has not been taken Latin 1 must be included in the university programme. If the candidate has Grade XIII standing in a science he may use the second general course as a free option.

With Philosophy as minor: a science, two free options. If the candidate has grade XIII standing in a science he may use the first general course as a free option.

## (d) Two general examinations in English.

Except by special permission of the department, students making English their major subject in honours take their courses in the following order: 2 or 5, 10 (An introduction to honours in English); 14 (Old and Middle English); 15 (Shakespeare and Elizabethan drama); 19 (English literature from 1500 to 1700), 20 (English literature from 1780 to 1880); 22 (English literature from 1880 to 1940), with one reading course in each of the second, third and fourth years. As the Honours Course is planned as a progressive whole it is important that this order be followed.

5. A minor in English normally consists of English 2 (A general introduction to English literature) or 5 (The Neo-Classical Age), 10 (An introduction to honours in English), and any two chosen from 15 (Shakespeare and Elizabethan drama), 19 (English literature from 1500 to 1700), 20 (English literature from 1780 to 1880), and 22 (English literature from 1880 to 1940).



6. Students offering English for the General Honours Course take the minor as prescribed in 5 together with one reading course.

7. For information about the requirements for the High School Teaching Certificate in English with a minor in Social History and the certificates in English and Latin, and English and French, see pages 112 and 113.

8. For information about scholarships in English see pages 68-70.

### COURSES OF INSTRUCTION (Pass)

#### ENGLISH A.

At the beginning of the Session, all first year students are given a test set by the Department of English. If they fail to pass they are required to take English A. This course consists of two hours of instruction per week, including the writing of original passages or essays, précis, and exercises to improve style and expression.

Once a student is enrolled in English A, the course becomes one of the requirements for a degree, and must be taken as an extra class.

A test is given in December and students who pass are released from the course; otherwise they must continue in it until they have passed an examination.

#### ENGLISH 1. PROSE COMPOSITION, WITH LITERARY BACKGROUND.

A practical course in prose composition, with parallel reading.

Prescribed texts: N. Foerster and J. M. Steadman, *Writing and Thinking* (Boston: Houghton Mifflin; Toronto: Thomas Allen); Dorothy Brewster, *A Book of Modern Short Stories* (Toronto: Macmillan); Sharon Brown (ed.), *Essays of Our Times* (Toronto: W. J. Gage).

During the session at least one novel, one biography, and one play will be prescribed.

*Monday, Wednesday, and Friday at 10.*

#### ENGLISH 2. A GENERAL INTRODUCTION TO ENGLISH LITERATURE.

This course deals with some major works in English literature. It includes the following writers: Chaucer, Shakespeare, Donne, Bacon, Milton, Pope, Boswell, Wordsworth, Arnold, Hardy, T. S. Eliot. A detailed list may be obtained from the Department of English or the Registrar's Office. Emphasis is placed also on English composition.

Section A—Monday, Wednesday, Friday at 10.

Sections B1, B2—Tuesday, Thursday, Saturday at 9.

Sections C1, C2, C3—Tuesday, Thursday, Saturday at 11.

Each student must possess a satisfactory English dictionary, such as *The Concise Oxford* or *The Thorndike-Barnhart Comprehensive Desk Dictionary*.

### ENGLISH 3. THE ENGLISH NOVEL.

A survey of the novel from Jane Austen to the present day.

Prescribed texts: A list may be obtained from the Department of English or from the Registrar's Office.

Monday, Wednesday, Friday at 11.

Professor Whalley and Mr. Cole.

### ENGLISH 5. THE NEO-CLASSICAL AGE.

Prescribed text: Bredvold, McKillop and Whitney, *18th Century Poetry and Prose* (New York: The Ronald Press).

Monday, Wednesday, Friday at 10.

Professor Alexander and Professor Whalley.

### ENGLISH 7. AMERICAN AND CANADIAN LITERATURE.

Prescribed texts: Howard Mumford Jones and Ernest E. Leisy, edd. *Major American Writers* (New York: Harcourt, Brace); A. J. M. Smith, ed. *The Book of Canadian Poetry* (Toronto: W. J. Gage); C. G. D. Roberts, *Neighbours Unknown* (Toronto: Macmillan).

Monday, Wednesday, Friday at 9.

Professor Vincent.

### COURSES OF INSTRUCTION (Honours)

### ENGLISH 10. AN INTRODUCTION TO HONOURS IN ENGLISH.

A general study of the history of the English language, of literary forms, and of the fundamental principles of literary criticism.

Prescribed texts: Henry Alexander, *The Story of Our Language* (Toronto: Thomas Nelson); Smith and Parks, *The Great Critics* (New York: Norton); H. Caudwell, *The Creative Impulse* (Macmillan).

Tuesday, Thursday, Saturday at 10.

Professor Alexander and Professor Whalley.

NOTE: This course is intended only for those who propose to take honours in English.

ENGLISH 14. First term: OLD ENGLISH.

C. Alphonso Smith, *An Old English Grammar and Reader* (Boston: Allyn and Bacon).

Second term: MIDDLE ENGLISH.

A study of the transition writers and of Chaucer's poetry, based on the following works: *The Romaunt of the Rose*, *The Book of the Duchesse*, *The Parlement of Foules*, *Troilus and Criseyde*, *The House of Fame*, *The Prologue to the Legend of Good Women*, *The Canterbury Tales*.

Prescribed texts: *Chaucer's Complete Works*, edited by F. N. Robinson (Boston: Houghton Mifflin); *The Nun's Priest's Tale*, edited by K. Sisam (Toronto: Oxford University Press); Grace Hadow, *Chaucer and His Times*, Home University Library (Toronto: Clarke, Irwin; New York: Henry Holt); B. Dickins and R. M. Wilson, *Early Middle English Texts* (Cambridge: Bowes and Bowes).

Monday, Wednesday, Friday at 3.30.

Professor Alexander.

ENGLISH 15. SHAKESPEARE AND ELIZABETHAN DRAMA.

A review of the life and environment of Shakespeare, and of his development as a dramatist, with lectures on the lives and works of his chief forerunners and contemporaries.

Prescribed texts: *The Complete Works of Shakespeare* (any available edition); Parks and Beatty, *English Drama, 900-1642* (Norton); G. B. Harrison, *Introducing Shakespeare* (Penguin Books); E. M. W. Tillyard, *The Elizabethan World Picture* (London: Chatto and Windus).

Tuesday, Thursday, Saturday at 9.

Mr. Cole.

ENGLISH 19. ENGLISH LITERATURE FROM 1500 TO 1700.

Prescribed texts: Edmund Spenser, *Poems* (Oxford University Press); *The Portable Milton* (New York: Viking Press); *Seventeenth Century Prose and Poetry*, edd., R. P. T. Coffin and A. M. Witherspoon (New York: Harcourt Brace).

Tuesday, Thursday, Saturday at 11.

Professor Ross.

## ENGLISH 20. ENGLISH LITERATURE FROM 1780 TO 1880.

Students are expected to be familiar with the poetry of Wordsworth, Coleridge, Blake, Byron, Shelley, and Keats; and with the following: Lamb, *Essays of Elia*; Hazlitt, *The Spirit of the Age*, *Table Talk*; Wordsworth, *Prefaces*; Coleridge, *Biographia Literaria*; Dorothy Wordsworth, *Journals*; Crabb Robinson, *Books and Their Writers*; Leigh Hunt, *Autobiography*; Moore, *Diary*; letters of Wordsworth, Coleridge, Lamb, Byron, Shelley, Keats. A brief introduction to the Victorian period will also be offered.

Prescribed texts: Oxford Standard Authors editions of Wordsworth, Coleridge, Shelley, Keats, Byron (Toronto: Oxford University Press); World's Classics Nos. 206, 310, 311 (Toronto: Oxford University Press). The Modern Library edition of *The Complete Poems of Keats and Shelley* may be used. Useful for marginal reading: *English Poetry and Prose of the Romantic Movement*, ed. G. B. Woods (Chicago: Scott, Foresman).

Tuesday, Thursday, Saturday at 9.

Professor Whalley.

## ENGLISH 22. ENGLISH LITERATURE FROM 1880 TO 1940.

A seminar course which should be taken in the final year of honours work.

Prescribed texts: G. D. Sanders and J. H. Nelson, edd. *Chief Modern Poets of England* (New York: Macmillan); T. S. Eliot, *Poems* (Penguin Books); Walter De La Mare, *Stories, Essays, and Poems* (London: Dent).

Monday, Wednesday, Friday at 11.

Professor Vincent.

## READING COURSES IN ENGLISH:

The prescribed texts for reading courses may be obtained from the Registrar's Office.

R 1. AMERICAN AND CANADIAN LITERATURE. Professor Vincent.

R 2. THE VICTORIAN AGE. Professor Ross.

R 3. THE ENGLISH NOVEL. Professor Whalley.

## GRADUATE COURSES

For information about graduate courses in English, see the Calendar of Graduate Studies.



## FRENCH LANGUAGE AND LITERATURE

W. H. Evans, B.A., Docteur de l'Université de Paris, PROFESSOR

Glen Shortliffe, M.A., Ph.D., ASSOCIATE PROFESSOR

R. L. Fauconnier, L. ès L., Agrégé de l'Université, ASSOCIATE PROFESSOR

Jean Ogier, L. ès L., LECTURER

Jeanne M. McConnell, Brevet Supérieur, C.A.P., INSTRUCTOR

### REGULATIONS AND ANNOUNCEMENTS

1. French 1 is prerequisite to French 2, and French 2 is prerequisite to all other courses in French.

2. Candidates offering French as one of the subjects of concentration on the Pass Course take French 1 (First year French), 2 (Second year French), 3 (Third year Pass), if they have not included French in their Grade XIII programme; French 2, 3, 14 (Survey of French literature; prose composition), if they have offered French of Grade XIII as one of the subjects for admission.

3. The Honours Course in French.

Candidates planning to take the Honours Course in French are advised to offer Grade XIII subjects as follows: English, Latin, French, a science and a fifth subject which may be a third language, a second science or History. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

(a) The Major.

The major is made up as follows:

French 2 (Second year French)

French 10 (Language; French civilization)

French 20 (Seventeenth century literature)

French 11 (Language; history of the language)

French 21 (Eighteenth century literature)

French 23 (Nineteenth century; advanced prose composition)

French 25 (Sixteenth century literature)

With one course selected from Latin 2 (Translation and prose composition), Greek and Roman History 4 (A

survey of Greek and Roman society), Classical Literature 1 (The literature of Greece and Rome), English 15 (Shakespeare and Elizabethan drama), Italian A, a course in German.

French Reading Course 1 (France—history and institutions)

French Reading Course 2 (The nineteenth century novel)

French Reading Course 3 (La pensée française), or

French Reading Course 4 (Le roman Canadien-Français)

The Honours programme in French is planned as a progressive whole and it is important that the courses be taken in the following order: 2, 10, 20 in the first year of Honours; 11, 21 in the second year of Honours; 23, 25 in the final year.

(b) The Minor.

The minor may be:

Latin 2, 12 or 13, 20, 30, or

English 2 or 5, 10, any two chosen from 15, 19, 20, 22, or

German 2, 10, 12 and 14, or

Spanish 2, 10, 22 or 24, 29 or 30, or

History 3 or 5 or 6, 12, 13 or 19 and one other course numbered over 10.

(c) Compulsory general courses to complete the work for degree:

With Latin, German, Spanish or History as minor: English 2, Philosophy 1, a science. If the candidate has Grade XIII standing in a science he may use the third general course as a free option.

With English as minor: Philosophy 1, a science, a free option. If the candidate has Grade XIII standing in a science he may use the second general course as a free option.

(d) Two general examinations in French.

4. For information about the course of study leading to High School certificates in Latin and French, English and French, French and German, French and Spanish, see page 112.

5. A minor in French normally consists of French 2 (Second year French), 10 (Language; French civilization), 11 (Language; history of the language), 14 (Survey of French literature; prose composition).

6. Students offering French for the General Honours Course take the minor as prescribed in 5 with one reading course.

7. Oral Work.

(a) All oral examinations must be taken at the University.

(b) An oral examination is required of students taking French 2 (see French 2) and courses over French 2.

(c) All students taking any course numbered over 2 attend oral classes for one hour a week and take the oral examination in March. Students taking French 2 may be required to attend such classes.

(d) Hours are arranged at the beginning of term.

8. For information about scholarships in French see pages 70-71.

9. All students must provide themselves with a dictionary. For pass classes Harrap's *Shorter French and English Dictionary* should be procured. For honours classes *Le Petit Larousse Illustré* is indispensable.

### COURSES OF INSTRUCTION

#### FRENCH 1. FIRST YEAR FRENCH.

Barton and Sirich, *Simplified French Review Grammar and Composition* (Crofts); Palamountain, *Learning French from Modern Writers* (Macmillan); Simenon, *Le témoignage de l'enfant de chœur* (Clarke-Irwin); Pagnol, *Topaze* (Heath).

Tuesday, Thursday, Saturday at 11.

Mr. Ogier.

#### FRENCH 2. SECOND YEAR FRENCH.

Romains, *Knock* (Appleton-Century); Balzac, *Le Curé de Tours* (Heath); Zola, *La Débâcle* (Heath); Whitmarsh, *Complete French Course* (Longmans).

The oral examination will be held in March. Students, in order to be credited with this course, must satisfy the oral requirements at the University, either during the term or at the Summer School.

Monday, Wednesday, Friday at 10.

Tuesday, Thursday, Saturday at 10.

Professors Evans, Shortliffe, Fauconnier and Mr. Ogier.

## FRENCH 3. THIRD YEAR PASS.

Whitmarsh and Jukes, *Advanced French Course* (Longmans); Steinhauer and Walter, *Omnibus of French Literature*, Vol. 1 (Macmillan); R. Rolland, *L'Aube* (Holt); Gide, *Isabelle* (Appleton-Century).

Tuesday, Thursday, Saturday at 10.

Mr. Ogier.

## FRENCH 10. LANGUAGE; FRENCH CIVILIZATION.

Cattanès and Robert, *Promenades historiques et littéraires* (Harcourt, Brace); Chinard, *Scènes de la vie française* (revised edition, 1950) (Ginn); Ritchie, *New Manual of French Composition* (C.U.P.); Mansion, *Grammar of Present-Day French, and Exercises in French Syntax* (Harrap).

Monday, Wednesday, Friday at 11.

Professor Fauconnier.

## FRENCH 11. LANGUAGE; HISTORY OF THE LANGUAGE.

Prerequisite: French 10.

Ritchie, *New Manual of French Composition* (C.U.P.); Armstrong, *The Phonetics of French* (Bell); Paton, *Manual of Old French* (Nelson); Ritchie and Simons, *French Passages for Translation* (C.U.P.).

Monday, Wednesday, Friday at 9.

Professor Evans.

## FRENCH 14. SURVEY OF FRENCH LITERATURE; PROSE COMPOSITION.

Steinhauer and Walter, *Omnibus of French Literature*, Vols. 1 and 2 (Macmillan); Whitmarsh and Jukes, *Advanced French Course* (Longmans).

Monday, Wednesday, Friday at 10.

Professor Shortliffe.

## FRENCH 20. SEVENTEENTH CENTURY LITERATURE.

Castex and Surer, *XVII<sup>e</sup> siècle* (Hachette); Corneille, *Cinna: L'illusion comique*; Molière, *L'Ecole des Femmes*; *La critique de l'Ecole des Femmes*; Racine, *Bajazet*, *Athalie*; *La Fontaine, Fables choisies* (vol. 1) (All Classiques Larousse).

Tuesday, Thursday, Saturday at 11.

Professor Evans.



## FRENCH 21. EIGHTEENTH CENTURY LITERATURE.

Fellows and Torrey, *The Age of Enlightenment* (Crofts); Voltaire, *Choix de Contes* (C.U.P.); Prévost, *Manon Lescaut* (Larousse); Rousseau, *Confessions* (Clarke, Irwin).

Monday, Wednesday, Friday at 11.

Professor Shortliffe.

## FRENCH 23. NINETEENTH CENTURY; ADVANCED PROSE COMPOSITION.

*French Plays of the Nineteenth Century* (Harper); Galland and Cros, *Nineteenth Century French Verse* (Appleton-Century); Galland and Cros, *Nineteenth Century French Prose* (Appleton-Century); Ritchie, *New Manual of French Composition* (C.U.P.); Mansion, *Grammar of Present-Day French; Exercises in French Syntax* (Harrap).

Tuesday, Thursday, Saturday at 11.

Professor Fauconnier.

## FRENCH 25. SIXTEENTH CENTURY LITERATURE.

Evans and Jones, *Prose and Verse Selections from Sixteenth Century French Authors* (Crofts).

Monday, Wednesday, Friday at 11.

Professor Evans.

## READING COURSES IN FRENCH.

## R 1. FRANCE—HISTORY AND INSTITUTIONS.

Guérard, *French Civilisation*; Siegfried, *France, a Study in Nationality*; Brogan, *The Development of Modern France*; O. R. Taylor, *The Fourth Republic of France*; Ritchie, *France, a Companion to French Studies*; *Encyclopédie politique de la France et du monde* (Selections); Earle, *Modern France* (Selections).

Professor Shortliffe.

## R 2. THE NINETEENTH CENTURY NOVEL.

V. Hugo, *Notre Dame de Paris*; Stendhal, *Le Rouge et le Noir*; Balzac, *Eugénie Grandet*; Flaubert, *Madame Bovary*; V. Hugo, *Les Misérables*; Goncourt, *Manette Salomon*; Zola, *La Fortune des Rougon*, *Le Roman expérimental*; Daudet, *Le Nabab*; Maupassant, *Pierre et Jean*; P. Bourget, *Le Disciple*; A. France, *L'Orme du Mail*.

Professor Fauconnier.

## R 3. LA PENSÉE FRANÇAISE.

Montaigne, *Essais*; Descartes, *Discours de la Méthode*; Pascal, *Pensées*; Voltaire, *Traité sur la Tolérance*; J. J. Rousseau, *Contrat Social*, *Profession de foi du vicaire savoyard*; A. Comte, *Cours de philosophie positiviste*, leçons 1 et 2; Taine, *Introduction à l'histoire de la littérature anglaise*; Bergson, *Le Rire*; Sartre, *Qu'est-ce que la littérature?*

Professor Shortliffe.

## R 4. LE ROMAN CANADIEN-FRANÇAIS.

Gaspé, *Les Anciens Canadiens*; Gérin-Lajoie, *Jean Rivard le défricheur*; Grignon, *Un homme et son péché*; Savard, *Menaud, maître draveur*; Desrosiers, *Les engagés du grand portage*; Aloné des Lestres, *L'appel de la race*; Roquebrune, *Les dames Lemarchand*; R. Charbonneau, *Fontile*; G. Martin, *Tentations*; Lemelin, *Au pied de la pente douce*; Germaine Guèvremont, *Le survenant*; Gabrielle Roy, *Bonheur d'occasion*; Giroux, *Au delà des visages*.

Mr. Ogier.

## GRADUATE COURSES

For information about graduate courses in French, see the Calendar of Graduate Studies.

## GEOLOGICAL SCIENCES

M. B. Baker, B.A., B.Sc., LL.D., F.R.S.C., F.G.S.A., EMERITUS PROFESSOR AND CURATOR OF THE GEOLOGICAL MUSEUM

J. E. Hawley, M.A., Ph.D., F.G.S.A., F.R.S.C., MILLER MEMORIAL RESEARCH PROFESSOR AND CHAIRMAN OF GRADUATE GEOLOGICAL STUDIES

B. Rose, B.Sc., Ph.D., F.R.S.C., F.G.S.A., PROFESSOR

J. W. Ambrose, B.A., Ph.D., F.R.S.C., F.G.S.A., PROFESSOR AND CHAIRMAN OF UNDERGRADUATE GEOLOGICAL STUDIES

A. W. Jolliffe, M.A., Ph.D., F.R.S.C., F.G.S.A., PROFESSOR

L. G. Berry, M.A., Ph.D., F.G.S.A., F.M.S.A., F.R.S.C., ASSOCIATE PROFESSOR

J. L. Usher, B.A., M.Sc., Ph.D., ASSISTANT PROFESSOR

M. M. Fitzpatrick, M.A., LECTURER

Yadviga Rimsaite, RESEARCH ASSISTANT

Assistants—W. R. A. Baragar, B.A.Sc., H. D. Carlson, M.Sc., L. C. Coleman, B.A., A. D. Graham, B.A., W. E. Hale, M.Sc., G. M. Hogg, B.Sc., W. O. J. Groeneveld-Meijer, Dipl. Pet. Eng., D. H. Richter, B.Sc., W. R. Sproule, B.Sc., W. G. Wegenast, B.Sc.

## REGULATIONS AND ANNOUNCEMENTS

1. Students taking Geology 2 (Elementary mineralogy) must have Grade XIII standing in Chemistry or have passed in Chemistry 1. Geology 1 (Elementary geology and physiography) and 2 (Elementary mineralogy) are prerequisite for courses numbered 10 and over. Geology 11 (Structural geology and geomorphology), 12 (Optical mineralogy and petrography) and 14 (Descriptive and determinative mineralogy) are prerequisite for courses numbered 16 and over.

2. Students selecting Geological Science as one of the subjects of concentration on the Pass Course are required to take Geology 1 (Elementary geology and physiography) and 2 (Elementary mineralogy). The third course may be chosen from Geology 10a (Elements of optical mineralogy) with 13b (Physical mineralogy and crystallography), or Geology 11 (Structural geology and geomorphology), or Geology 12 (Optical mineralogy and petrography).

3. The Honours Course in Geological Sciences.

Candidates planning to take the Honours Courses in the Geological Sciences should offer Grade XIII subjects as follows: English, Mathematics (3 papers), Physics, Chemistry and a language. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack. They should note, however, that these deficiencies must be made up without delay.

Three Honours Courses are offered:

- I. General Geology with a minor in Chemistry;
- II. Mineralogy and Petrology with a minor in Chemistry;
- III. Paleontology and Stratigraphy with a minor in Biology.

4. Candidates for admission to an Honours Course in the Geological Sciences must make sixty-two per cent in Geology 1 (Elementary geology and physiography) and 2 (Elementary mineralogy).

5. The minor in the Geological Sciences with Chemistry as major is made up as follows: Geology 1 (Elementary geology and physiography), 2 (Elementary mineralogy), 10a (Elements of optical mineralogy), and 13b (Physical mineralogy and crystallography) or 12 (Optical mineralogy and petrography), 14 (Descriptive and determinative mineralogy), and a half-course from Geology 18b (Sedimentation) or 23 (half-course) (Geology of Canada).

# I. GENERAL GEOLOGY

## First Year

Geology 1 (Elementary geology and physiography)  
 Mathematics 2 (Differential and integral calculus)  
 Physics 2 (Electricity, magnetism, and light)  
 Chemistry 2 (General chemistry)  
 Philosophy 1 (Introduction to philosophy)

## Second Year

Geology 2 (Elementary mineralogy)  
 Geology 11 (Structural geology and geomorphology)  
 Chemistry 11 (Analytical chemistry)  
 Chemistry 13 (Quantitative analysis)  
 English 2 (A general introduction to English literature)

# II. MINERALOGY AND PETROLOGY

## First Year

Geology 1 (Elementary geology and physiography)  
 Mathematics 2 (Differential and integral calculus)  
 Physics 2 (Electricity, magnetism, and light)  
 Chemistry 2 (General chemistry)  
 Philosophy 1 (Introduction to philosophy)

## Second Year

Geology 2 (Elementary mineralogy)  
 Geology 11 (Structural geology and geomorphology)  
 Chemistry 11 (Analytical chemistry)  
 Chemistry 13 (Quantitative analysis)  
 English 2 (A general introduction to English literature)

# III. PALEONTOLOGY AND STRATIGRAPHY

## First Year

Geology 1 (Elementary geology and physiography)  
 Biology 1 (General biology)  
 Chemistry 2 (General chemistry)  
 English 2 (A general introduction to English literature)  
 Philosophy 1 (Introduction to philosophy)

## Second Year

Geology 2 (Elementary mineralogy)  
 Geology 11 (Structural geology and geomorphology)  
 Biology 10 (General botany)  
 Biology 16 (Comparative vertebrate anatomy)  
 Chemistry 11 (Analytical chemistry)



### Third Year

Geology 12 (Optical mineralogy and petrography)  
 Geology 14 (Descriptive and determinative mineralogy)  
 Geology 15a (Engineering geology)  
 Geology 18b (Sedimentation)  
 Geology 25a (Systematic paleontology)  
 Geology Reading Course 1 (History of the progress of geology)  
 Chemistry 14 (Physical chemistry)

### Third Year

Geology 12 (Optical mineralogy and petrography)  
 Geology 18b (Sedimentation)  
 Geology 25a (Systematic paleontology)  
 Geology Reading Course 1 (History of the progress of geology)  
 A course in Biology  
 Geology Reading Course 1 (History of the progress of geology)  
 Chemistry 14 (Physical chemistry)

### Third Year

Geology 12 (Optical mineralogy and petrography)  
 Geology 13b (Physical mineralogy and crystallography)  
 Geology 14 (Descriptive and determinative mineralogy)  
 Geology 18b (Sedimentation)  
 Chemistry 12 (Organic chemistry)

### Fourth Year

Geology 16a (Field geology)  
 Geology 20 (Historical geology)  
 Geology 21 (Economic geology of metallic minerals)  
 Geology 23 (half-course) (Geology of Canada and economic geology of non-metallics and fuels)  
 Geology 17 (Geophysical prospecting)  
 or  
 Geology 24 (Petrology)  
 Geology 27 (Research and thesis)  
 A Reading Course  
 Two general examinations in Geology

### Fourth Year

Geology 16a (Field geology)  
 Geology 17 (Geophysical prospecting)  
 Geology 21 (Economic geology of metallic minerals)  
 Geology 23 (half-course) (Geology of Canada and economic geology of non-metallics and fuels)  
 Geology 24 (Petrology)  
 Geology 27 (Research and thesis)  
 A Reading Course  
 Two general examinations in Geology

### Fourth Year

Geology 15a (Engineering geology)  
 Geology 16a (Field geology)  
 Geology 20 (Historical geology)  
 Geology 23 (half-course) (Geology of Canada and economic geology of non-metallics and fuels)  
 Geology 27 (Research and thesis)  
 Geology Reading Course 3 (Earth history)  
 Two general examinations in Geology

## COURSES OF INSTRUCTION

## GEOLOGY 1. ELEMENTARY GEOLOGY AND PHYSIOGRAPHY.

LECTURES: External and internal geological processes and the resultant topography; an outline of the history of the earth; fossils and their significance; a preparatory course along with Geology 2 (Elementary mineralogy) for the Honours Course in Geological Sciences; a background course for physical geography; illustrated with maps, models and pictures.

LABORATORY: Identification of common rocks, minerals and fossils; interpretation of geological and topographical maps; field trips during the fall term.

Text-book: *Outlines of Geology*, Longwell et al (John Wiley and Sons).

LECTURES—*Tuesday and Thursday at 11.*

LABORATORY—Three sections; *Monday, 1-4; Tuesday, 1-4; Wednesday, 1-4.*

(Not more than 40 students per section)

Professor Usher.

## GEOLOGY 2. ELEMENTARY MINERALOGY (MINERALOGY 1).

A course in elementary crystallography, blowpipe analysis and descriptive and determinative Mineralogy of about 100 common or more important minerals.

Prerequisite: Honour Matriculation Chemistry, or Chemistry 1, taken concurrently.

Text-book: Hurlbut, *Dana's Manual of Mineralogy*, 15th Ed. (John Wiley and Sons, Inc., New York, 1941).

or

*Mineralogy*, Kraus, Hunt and Ramsdell (McGraw-Hill), 2nd Ed. 1951). The latter is more complete and is recommended for students without much training in geology and geometry.

For students intending to continue in Mineralogy, Ford, *Dana's Text-book of Mineralogy*, 4th Edition (John Wiley and Sons, Inc., New York, 1932).

Two sections with Science Geology II.

LECTURES—*Monday and Wednesday at 11.*

LABORATORY—*Tuesday, 1.30 - 3.30 or 3.30 - 5.30.*

Professor Berry.

## GEOLOGY 10a. ELEMENTS OF OPTICAL MINERALOGY (MINERALOGY 10a).

Optical properties of crystals including non-opaque minerals and chemical compounds.

Prerequisite: Mathematics 1 and Physics 1.

Text-book: Wahlstrom, *Optical Crystallography*, 1951, 2nd Edition (Wiley).

Reference Book: *Manual of Petrographic Methods*, Johannsen (McGraw-Hill, 1928).

LECTURES—Wednesday and Friday at 10, first term.

LABORATORY—Thursday, 1.30 - 3.30, or Saturday 9 - 11.

Professor Berry.

## GEOLOGY 11. STRUCTURAL GEOLOGY, AND GEOMORPHOLOGY.

Inherent and imposed structures in sedimentary, igneous, and metamorphic rocks, with particular attention to sedimentation, faulting, folding and shearing.

Topography using structure as a basis of interpretation. Physiographic cycles, under normal, arid, glacial, karst and marine conditions. The interpretation of topographic and geologic maps. Illustrations from Canadian occurrences where possible.

Text-books: Nevin, *Structural Geology*; Platt, *Geological Map Exercises*.

LECTURES—Monday and Wednesday at 9.

LABORATORY—Friday, 1.30 - 3.30.

Professor Rose.

## GEOLOGY 12. OPTICAL MINERALOGY AND PETROGRAPHY.

Optical properties of non-opaque minerals; introduction to the use of the polarizing microscope; introduction to the study of rocks.

Prerequisites: Geology 1 and 2.

Text-books: Wahlstrom, *Optical Crystallography*, 2nd Ed., 1951; Wahlstrom, *Igneous Minerals and Rocks*; Pirsson and Knopf, *Rocks and Rock Minerals*.

LECTURES—Wednesday and Friday at 10.

LABORATORY—Thursday, 1.30 - 3.30 or Saturday, 9 - 11, first term;

Wednesday, 3.30 - 5.30 and Thursday, 1.30 - 3.30, second term.

Professor Berry.

GEOLOGY 13b. PHYSICAL MINERALOGY AND CRYSTALLOGRAPHY  
(MINERALOGY 10b).

An advanced course in the character of crystals, crystal measurements and crystal drawing.

Prerequisites: Geology 2, Physics 1, Mathematics 1.

Text-books: Dana, *Text-book of Mineralogy*, 1932 (Wiley), or Phillips, *An Introduction to Crystallography*, 1946 (Longmans).

Books of Reference: Bragg, *X-rays and Crystal Structure*, 4th Edit.; Evans, *Crystal Chemistry* (Cambridge Univ. Press), 1939; Bunn, *Chemical Crystallography* (Oxford), 1946.

LECTURES—Monday at 10, Friday at 9, second term.

LABORATORY—Thursday, 3.30 - 5.30, second term.

Professor Berry.

GEOLOGY 14. DESCRIPTIVE AND DETERMINATIVE MINERALOGY  
(MINERALOGY 11).

The properties, occurrences, valuation, and uses of ore and other important minerals, and their determination by blowpipe and microchemical methods.

Prerequisites: Geology 1 and 2.

Text-books: Dana's *Text-book of Mineralogy*, Ford, 4th Ed. (John Wiley and Sons); *Economic Mineral Deposits*, Bateman (McGraw-Hill, 1950).

LECTURES—Tuesday and Friday at 11.

LABORATORY—Wednesday, 1.30 - 3.30.

Professor Jolliffe.

GEOLOGY 15a. ENGINEERING GEOLOGY.

A study of the application of geological principles to engineering projects. Properties of the regolith, distribution and movement of subsurface waters. earth movements and structures, stream and shoreline processes, and special features of glacial action will be discussed in relation to foundation problems, tunnels and excavations, dam and reservoir sites, river improvement and harbour maintenance.

Prerequisites: Geology 1 and 2.

Text-book: *Elements of Engineering Geology* (Ries & Watson) or

*Geology for Engineers*, Trefethen (Van Nostrand).

LECTURES—Wednesday at 11 and Friday at 8, first term.

Professor Ambrose.



## GEOLOGY 16a. FIELD GEOLOGY (GEOLOGY 17a).

The field work of this course should be taken at the end of the penultimate year.

Field work consists of a systematic geological survey of a selected area in southeastern Ontario. Unless otherwise announced, headquarters for the survey camp will be Queen's Biological Station on Lake Opinicon. Students live at the camp and complete their field work during the ten days following spring examinations (dates to be announced). Each student plots the survey data and prepares a contoured geological map to scale, together with a geological report on the area studied during the fall term following. Some time is also devoted to the practice of elementary photogrammetry.

Prerequisites: Geology 1, 2, 11, 12.

Reference Book: *Field Geology*.

LECTURES AND LABORATORY—Monday, 1.30-4.30, first term.

Professor Usher.

## GEOLOGY 17. GEOPHYSICAL PROSPECTING (GEOLOGY 20b).

A course of lectures is given on methods of geophysical prospecting, including magnetic, electrical, seismic, and gravimetric methods and methods dependent upon radioactivity of rocks and minerals. Emphasis is placed on applications to particular problems in geology, and on interpretation of results by the geologist.

Students are given the opportunity of using the instruments in the laboratory and making test geophysical surveys.

Prerequisites: Geology 1 and 2.

Reference Books: *Eve and Keys, Applied Geophysics in the Search for Minerals*; *Heiland, Geophysical Exploration*.

LECTURES—Monday at 10, all year; Thursday at 11, first term; Wednesday at 10, second term.

LABORATORY—Wednesday 1.30-5.30.

Mr. Fitzpatrick.

## GEOLOGY 18b. SEDIMENTATION.

A short course in the principles of sedimentation and in sedimentary petrography.

Prerequisites: Geology 1, 2, 10a, 11, 12.

Text: *Sedimentary Rocks*, Pettijohn (Harper), or *Stratigraphy and Sedimentation*, Krumbein and Sloss (Freeman, 1951).

Reference texts: *Principles of Sedimentation*, W. H. Twenhofel (McGraw-Hill, 1939); *Sedimentary Petrography*, H. B. Milner (Thos. Murby, 1929); *Manual of Sedimentary Petrography*, Krumbein and Pettijohn (Appleton-Century, 1938).

LECTURES—Two hours per week, second term.

LABORATORY—Two hours per week, second term.

Professor Usher.

#### GEOLOGY 20. HISTORICAL GEOLOGY (GEOLOGY 13).

Continental evolution and development of geologic life with special reference to North America.

Text-books: Dunbar, *Historical Geology* (John Wiley & Sons); Shimer, *An Introduction to the Study of Fossils* (Macmillan).

LECTURES—Tuesday and Thursday at 9.

LABORATORY—Thursday, 3.30 - 5.30.

Professor Usher.

#### GEOLOGY 21. ECONOMIC GEOLOGY OF METALLIC MINERALS (GEOLOGY 15, MINERALOGY 14a).

The principles of ore deposition and description of ore deposits, Canadian and others. The laboratory work consists of examination of ores in both hand specimens and polished sections and problems.

Text: *Economic Mineral Deposits*, Bateman (McGraw-Hill, 1950); or *Mineral Deposits*, Lindgren (McGraw-Hill, 1933).

References: *Mineral Deposits of the Canadian Shield*, Bruce (Macmillan); *Structural Geology of Canadian Ore Deposits* (Can. Inst. Mining & Met., 1949); Publications of the Geological Survey, Ont. Dept. of Mines and Quebec Dept. of Mines.

LECTURES—Three hours per week, first term; two hours, second term.

Monday and Tuesday at 11 (Economic Geology).

Wednesday at 10, first term (Mineralography).

LABORATORY—Thursday 1.30 - 3.30 or 3.30 - 5.30.

Professor Hawley.

#### GEOLOGY 23 (GEOLOGY 15).

Geology of Canada and economic geology of non-metallics and fuels.

A study of the character, structure and ages of the rock formations in the physiographic provinces of Canada. The economic geology

of the non-metallics and fuels is studied in conjunction with the general geology of the various regions. This course is to be counted as a half-course.

Text: *Geology and Economic Minerals of Canada*, Geol. Sur. of Can., 1947.

LECTURES—One hour per week.

Mr. Fitzpatrick.

#### GEOLOGY 24. PETROLOGY (GEOLOGY 14).

A course of lectures will be given on the classification of igneous, sedimentary, and metamorphic rocks. Considerable attention will be given to the genesis of rock types, and to the physico-chemical conditions effective in the generation and differentiation of magmas.

Laboratory work will consist of the study of rock suites and determination of mineral composition by petrographic methods.

Prerequisites: Geology 1, 2, 12.

LECTURES—*Tuesday and Thursday at 10.*

LABORATORY—*Tuesday, 1.30-3.30.*

Professor Ambrose.

#### GEOLOGY 25a. SYSTEMATIC PALEONTOLOGY (GEOLOGY 18).

Fossils, their classification and identification.

Offered in 1952-53.

LECTURES—*Monday at 11 and Friday at 9, first term.*

LABORATORY—*Monday, 1.30-3.30, first term.*

Professor Usher.

#### GEOLOGY 27. RESEARCH AND THESIS.

Directed research on either mineralogical or geological problems designed to train the student in research methods. A thesis embodying the results of the investigation is required. Material for such studies may be gathered by students during summer field work or may be supplied by the department.

This course may be taken in lieu of a reading course.

*Six hours per week.*

#### READING COURSES IN GEOLOGY.

\* Books marked thus must be purchased by the student for himself.

##### R 1. HISTORY OF THE PROGRESS OF GEOLOGY.

\*Agar, *Flint and Longwell, Geology from Original Sources*;  
 \*Willis and Salisbury, *Outlines of Geologic History* (University of Chicago Press); \*Source Book in Geology, Mather and Mason (McGraw-Hill); Geikie, *The Founders of Geology*; Adams, *The Birth and Development of Geologic Science*; Lyell II, *Principles of Geology*, chapters I to IV.

## R 2. MAGMAS AND THEIR BEHAVIOUR.

\*Tyrrell, *The Principles of Petrology* (Dutton, New York);  
 \*Daly, *Igneous Rocks and the Depths of the Earth* (McGraw-Hill); Rastall, *Geological Magazine*, Vol. LVII, p. 290; Origin of Granites: Geol. Society of America; Memoir 23, Balk, *Structural Behaviour of Igneous Rocks*, Geol. Society of America; Memoir 5, Harker, *Petrology for Students* (Cambridge Press); Shand, *Irruptive Rocks*.

## R 3. EARTH HISTORY.

Lull, *Evolution of the Earth and its Inhabitants*; Snider, *Earth History*; Raymond, *Prehistoric Life*; Romer, *Man and Vertebrates*; Seward, *Plant Life Through the Ages*.

## READING COURSES IN MINERALOGY.

### R 4. WORLD DISTRIBUTION OF MINERALS AND ITS SIGNIFICANCE.

G. A. Roush, *Strategic Minerals* (McGraw-Hill, 1940); C. K. Leith, *World Minerals and World Politics* (McGraw-Hill, 1931); \*World Atlas of Commercial Geology, Part 7, Distribution of Mineral Production, U.S.G.S., 1921; \*F. W. Clarke, *The Data of Geochemistry*, 5th Ed., U.S.G.S. Bulletin 770; *Mineral Economics*, Vol. III, Am. Institute of Mining Engineering Series (McGraw-Hill, 1937); *Minerals in World Affairs*, T. S. Lovering (Prentice-Hall, 1943).

### R 5. X-RAYS AND CRYSTAL STRUCTURE.

R. W. James, *X-ray Crystallography*, 1930 (Methuen and Co., London); \**The Crystalline State*, W. H. and W. L. Bragg, Vol. I (Macmillan, 1934); *Atomic Structure of Minerals*, W. L. Bragg (Cornell Univ. Press, 1937); R. W. G. Wyckoff, *The Structure of Crystals*, 2nd Ed., 1931.

### R 6. METAMORPHISM OF MINERALS.

C. K. Leith and W. J. Mead, *Metamorphic Geology* (New York, 1915); *Metamorphism*, A. Harker (Methuen & Co., 1932); F. W. Clarke, *The Data of Geochemistry*, 5th Ed., U.S.G.S. Bulletin 770; Selected Papers in the Journal of Geology and Economic Geology.



## GRADUATE COURSES

For information about graduate courses in Geological Sciences, see the Calendar of Graduate Studies.

## GERMAN LANGUAGE AND LITERATURE

Hilda C. Laird, B.A., B.L.S., Ph.D., PROFESSOR

Hans Eichner, B.A., Ph.D., ASSISTANT PROFESSOR

(on leave of absence, Session 1952-53)

H. H. Weil, M.A., LECTURER (Session 1952-53)

## REGULATIONS AND ANNOUNCEMENTS

1. German A may be counted towards a pass degree or as an optional course towards an honours degree. It may not be counted towards a major or a minor in German. Students who enter the University without matriculation in German and who wish to specialize in this subject may complete their programme of work in the usual time by taking German A during their first winter session and German 1 in the following summer.

2. Students offering German as one of the three subjects of concentration on the Pass Course should take A (Preparatory German), 1 (Elementary German) and 2 (Intermediate German), if they have not studied German previously; 1, 2 and 10 (An introduction to the study of German literature; composition and translation), if they have Grade XII standing in German; 2, 10 and one further honours course, German 12 (Nineteenth century drama; advanced composition) or 14 (Modern literature; advanced composition) if they have Grade XIII standing in German. Additional courses in German may be taken with the consent of the department.

3. The Honours Course in German.

Candidates planning to take the Honours Course in German are advised to offer Grade XIII subjects as follows: English, Latin, German, French, and a science. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack. (See regulation 1, above.)

## (a) The Major.

The major is made up as follows:

- German 2 (Intermediate German)
- German 10 (An introduction to the study of German literature; composition and translation)
- German 12 (Nineteenth century drama; advanced composition)
- German 14 (Modern literature; advanced composition)
- German 15 (Goethe and Schiller)
- German 16 (German literature of the early nineteenth century)
- German 20 (Introduction to Middle High German)
- With either Latin 2 (Translation and prose composition) or Philosophy 10 (Problems of philosophy)
- German Reading Course 1 (Deutsche Geschichte)
- German Reading Course 2 (Der Realismus in Deutschland)
- German Reading Course 3 (Der deutsche Roman)

## (b) The Minor.

The minor may be:

- French 2, 10, 11, and 14, or
- Spanish 2, 10, 22 or 24, 29 or 30, or
- English 2 or 5, 10, any two chosen from 15, 19, 20, 22, or
- History 6, 12, 24 and 27, or
- Philosophy 1, 10, 27 and two advanced courses (see page 205, section 6).
- Other minors may be selected in consultation with the department.

## (c) Compulsory general courses to complete the work for a degree:

- English 2, Philosophy 1, a science. If the candidate has Grade XIII standing in a science he may use the third general course as a free option.

## (d) Two general examinations in German.

Students making German their major subject in honours and students taking the course leading to the High School Teaching Certificate in French and German should arrange their courses in German as follows: 2; 10 and either 12 or 14 in the first year of honours; 12 or 14 and 15 or 16 in the second year of honours; 15 or 16 in the final year. Reading courses may be taken in the second or in the final year of honours, or in the summer.

4. For information about the course of study leading to the High School Teaching Certificate in French and German, see page 112.

5. A minor in German normally consists of German 2 (Intermediate German), 10 (An introduction to the study of German literature; composition and translation), 12 (Nineteenth century drama; advanced composition), and 14 (Modern literature; advanced composition).

6. Students offering German for the General Honours Course take the minor as prescribed in 5 with German Reading Course 2.

7. Students taking honours in German are advised to read during the summer vacation as many as possible of the texts prescribed for the courses in which they intend to register during the following winter.

8. For information in regard to scholarships in German, see page 71.

9. Students should provide themselves at once with a dictionary, at first James' or Cassell's English-German Dictionary, then an all German one, such as Hoffman's *Wörterbuch der deutschen Sprache* or *Der Sprach-Brockhaus*.

## COURSES OF INSTRUCTION

### GERMAN A. PREPARATORY GERMAN.

This course is intended to meet the needs of students who enter the University with little or no knowledge of German. The work comprises drill on pronunciation, a study of the elements of grammar, the reading of easy literature, oral and written composition.

Text-books: Curts, *Basic German*, 3rd ed. (Prentice-Hall); Goedsche, *Sag's auf deutsch!* (Crofts); *Jugendpost*, A Periodical for students of German; Peter Fabrizius, *Wer zuletzt lacht . . .* (Appleton-Century).

Tuesday, Thursday, Saturday at 10, and one additional afternoon hour.

Professor Laird.

### GERMAN 1. ELEMENTARY GERMAN.

The work includes the reading of texts, a more advanced study of grammar and syntax (including written and oral exercises), memorizing of poems, writing from dictation, translation at sight, composition and oral practice.

Text-books: Chiles, *German Composition and Conversation* (Ginn); Foltin, *Aus nah und fern* (Houghton Mifflin); Spoerl, *Man kann ruhig darüber sprechen* (Heath); Fleissner and Fleissner, *Kleine Anthologie deutscher Lyrik* (Crofts).

*Tuesday, Thursday, Saturday at 10.*

Mr. Weil.

## GERMAN 2. INTERMEDIATE GERMAN.

The work consists of a more intensive study of modern literature, both prose and verse, oral and written composition, and a more advanced study of grammar and syntax. Extramural students, in order to be credited with this course, must satisfy the oral requirements.

Text-books: Cochran, *A Practical German Review Grammar* (Prentice-Hall); Diamond and Uhlendorf, *Mitten im Leben* (Holt); Schiller, *William Tell* (Holt); Kany and Sachs, *Advanced German Conversation* (Heath); Röseler, *Deutsche Novellen des 19. Jahrhunderts* (Holt).

*Monday, Wednesday, Friday at 10, and two practice hours.*

Professor Laird.

## GERMAN 10. AN INTRODUCTION TO THE STUDY OF GERMAN LITERATURE. COMPOSITION AND TRANSLATION.

Text-books: Bithell, *Advanced German Composition* (Methuen); Fleissner and Fleissner, *Die Kunst der Prosa* (Crofts); Hebbel, *Agnes Bernauer* (Oxford); Schiller, *Jungfrau von Orleans* (Ginn); Schmidt, *Buch der Balladen* (Bertelsmann). Other reading will be assigned.

*Monday, Wednesday, Friday at 2.30.*

Professor Laird and Mr. Weil.

## GERMAN 12. NINETEENTH CENTURY DRAMA.

### ADVANCED COMPOSITION.

Text-books: Campbell, *German Plays of the Nineteenth Century* (Crofts); Hauptmann, *Die Weber* (Prentice-Hall); Puckett, *Contemporary German Prose* (Holt); Whitney and Stroebe, *Advanced German Composition* (Holt).

*Tuesday, Thursday, Saturday at 9.*

Professor Laird.

## GERMAN 14. MODERN LITERATURE, 1880-1945.

### ADVANCED COMPOSITION.

Text-books: Sudermann, *Heimat* (Heath); Hauptmann, *Die versunkene Glocke* (Fischer); Hofmannsthal, *Der Tor und*



der Tod (Blackwell's); Thomas Mann, *Tonio Kröger* (Blackwell's); Hermann Hesse, *Demian* (Fischer); Kaiser, *Gas I, Gas II*; Kafka, *Der Prozess* (Schocken); Bithell, *Advanced German Composition* (Methuen).

Not offered in 1952-53.

#### GERMAN 15. GOETHE AND SCHILLER.

Text-books: Goethe, *Poems* (Crofts); Götz von Berlichingen (Ginn); *Die Leiden des jungen Werther* (Reclam. 67/67a); *Egmont* (Ginn); *Iphigenie auf Tauris* (Holt); *Torquato Tasso* (Reclam. 88); Schiller, *Die Räuber* (Reclam. 15/15a); *Kabale und Liebe* (Holt); *Don Carlos* (Oxford); *Wallenstein* (Holt); *Maria Stuart* (Holt).

Not offered in 1952-53.

#### GERMAN 16. GERMAN LITERATURE OF THE EARLY NINETEENTH CENTURY.

Text-books: Goethe, *Faust I and II*, ed. Calvin Thomas (Heath); Bruns, *Die Lese der deutschen Lyrik* (Crofts); Novalis, *Die Lehrlinge zu Sais*; *Klingsohrs Märchen* (Parnass); Hoffmann, *Das Fräulein von Scudery* (Parnass); Kleist, *Michael Kohlhaas* (Parnass); Eichendorff, *Aus dem Leben eines Taugenichts* (Parnass); Heine, *Harzreise*.

Other readings will be assigned.

Hours to be arranged.

Mr. Weil.

#### GERMAN 20. INTRODUCTION TO MIDDLE HIGH GERMAN.

Text-book: Bachmann, *Mittelhochdeutsches Lesebuch* (Beer).

Note: This course is intended only for those students who propose to take a full major in German.

Hours to be arranged.

Professor Laird.

#### READING COURSES IN GERMAN:

##### R.1. DEUTSCHE GESCHICHTE.

A general knowledge of German history will be required as well as familiarity with the prescribed texts.

Pinnow, *Deutsche Geschichte*; Ronge, *Tacitus' Germania und die wichtigsten antiken Stellen über Deutschland* (Read chaps. 1-27 of *Germania* only). Steinhausen, *Geschichte der*

deutschen Kultur, chaps. VI and VII; Treitschke, *Deutsche Geschichte im 19. Jahrhundert*, 'Einleitung' only. Bruford, *Germany in the 18th Century*; Henry Crabb Robinson, *Diary, Reminiscences and Correspondence*, chaps. 5-9; Brandenburg, *Die deutsche Revolution 1848*; Gooch, *Germany*; Ranke, *Deutsche Männer* (Insel 225); Spengler, *Der Untergang des Abendlandes*, 'Einleitung' only.

Reference Works: Bithell, *Germany, A Companion to German Studies*; Spruner-Menke, *Hand-Atlas für die Geschichte des Mittelalters und der neueren Zeit*; Robertson and Bartholomew, *Historical Atlas of Modern Europe*; Pagel, *Deutsche Geschichte in Bildern; Menschen der Zeit* (Blaue Bücher, Langewiesche); Chodowiecki, *Von Berlin nach Danzig*.

## R 2. DER REALISMUS IN DEUTSCHLAND.

A general knowledge of the development of German literature during the period covered by this course will be required, as well as first-hand knowledge of the books prescribed.

Karl Immerman, *Der Oberhof*; Droste-Hülshoff, *Die Judenbuche*; Otto Ludwig, *Zwischen Himmel und Erde* (Heath); Gustav Freytag, *Die Brüder vom deutschen Haus*; Theodor Storm, *Der Schimmelreiter* (Ginn); Gottfried Keller, *Der Landvogt von Greifensee* (Blackwell); Theodor Fontane, *L'Adultera*; C. F. Meyer, *Der Heilige* (Holt); Heyse, *L'Arabiata* (Heath); Wilhelm Raabe, *Die Chronik der Sperlingsgasse*.

References: J. G. Robertson, *A History of German Literature*; Hugo Bieber, *Der Kampf um die Tradition*; R. M. Meyer, *Literatur des 19. Jahrhunderts*; E. K. Bennett, *A History of the German "Novelle"*.

## R 3. DER DEUTSCHE ROMAN.

Grimmelshausen, *Der abenteuerliche Simplicissimus* (abridged ed.); K. P. Moritz, *Anton Reiser*; Goethe, *Wilhelm Meisters Lehrjahre*; Chamisso, *Peter Schlemihl*; Keller, *Der grüne Heinrich*; C. F. Meyer, *Jürg Jenatsch*; Hauptmann, *Emanuel Quint*; Thomas Mann, *Buddenbrooks*; Hesse, *Peter Camenzind*; Wiechert, *Das einfache Leben*.

## GRADUATE COURSES

For information about graduate courses in German, see the Calendar of Graduate Studies.

GREEK AND ROMAN HISTORY, SEE CLASSICS.

GREEK LANGUAGE AND LITERATURE, SEE CLASSICS.

# HEBREW LANGUAGE AND LITERATURE

Rev. S. M. Gilmour, B.D., Ph.D., D.D., ACTING PROFESSOR

Rev. H. A. Kent, E.D., M.A., D.D., LL.D., F.R.S.A., F.A.G.S.,  
SESSIONAL LECTURER

## REGULATIONS AND ANNOUNCEMENTS

Students proceeding to Theology may, with the permission of the Board of Studies, substitute Hebrew 1 for a course in Latin.

## COURSES OF INSTRUCTION

### HEBREW 1.

The aim of this class is to enable students to read any of the narrative parts of the Hebrew Scripture. The Christmas term is devoted entirely to thorough study and practice of grammar and exercises. After the Christmas vacation parts of Genesis and Samuel, or other books, will be read, in addition to the work in grammar and composition.

Text-books: Davidson, *Hebrew Grammar* (20th or later editions), pages 1-106; Kittel, *Biblia Hebraica*, or *Hebrew Bible*, issued by B. and F. Bible Society; *Lexicons*, Brown-Driver-Briggs, or Bagster.

Tuesday, Thursday, Saturday at 8.

Professor Gilmour.

### HEBREW 2.

This class aims at more advanced work in the Hebrew language than that attempted in course 1. The prophetic and poetic literature of the Old Testament will be studied and lectures given on Hebrew syntax and the principles of textual criticism of the Old Testament. Students will be practised regularly in translating English into Hebrew, both viva voce and in written exercises.

Text-books: Davidson, *Hebrew Grammar*, pages 106-236, *Hebrew Syntax*; *Hebrew Bible* and *Lexicons* as in course 1.

Tuesday, Thursday, Friday at 2.30.

Dr. Kent.

## HISTORY

W. E. C. Harrison, O.B.E., M.A., PROFESSOR

A. R. M. Lower, M.A., Ph.D., F.R.S.C., JAMES DOUGLAS PROFESSOR  
OF CANADIAN AND COLONIAL HISTORY

W. E. L. Smith, M.C., M.A., Ph.D., ASSOCIATE PROFESSOR

F. W. Gibson, M.A., ASSOCIATE PROFESSOR

F. J. Wilson, M.A., SENIOR TUTOR

Mrs. H. A. Elliott, B.A., SESSIONAL TUTOR

Gary Smith, B.A., R. SAMUEL McLAUGHLIN FELLOW (1952-53)

Michael Dafoe, B.A., SIR JAMES AIKINS FELLOW (1952-53)

### REGULATIONS AND ANNOUNCEMENTS

1. Students reading History as one of the subjects of concentration for a pass degree take History 3 (The North Atlantic Community), 5 (The Evolution of England) and 6 (The Evolution of Europe). If they wish to elect a fourth course in History, they are recommended to take History 4 (Greek and Roman History). Students whose work in the pass courses in History is satisfactory may take also one or more of History 11a (The United States), 12 (Mediæval Europe), 13 (The British Empire and Commonwealth), 20 (The History of Canada to 1818), 24a (The Renaissance) and 24b (The Reformation). In exceptional cases pass students with a sufficiently high standing in History may, with the permission of the department, be admitted in their final year to History 27 (National and International Europe) or 28 (The History of Canada since 1818).

#### 2. The Honours Course in History.

Candidates planning to take the Honours Course in History are advised to offer Grade XIII subjects as follows: English, Latin or Mathematics, History, French and an option which may be a second modern language. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Courses so as to include the subjects that they lack. If they do not offer History as a subject of Grade XIII, they may take History 3 (The North Atlantic Community) or History 5 (The Evolution of England) or History 6 (The Evolution of Europe).

Candidates offering History as a subject of Grade XIII with a grade not lower than B and intending to apply for admission to honours with History as major or minor may, in their first year, take



History 12 (Mediæval Europe) concurrently with History 3 (The North Atlantic Community) or 5 (The Evolution of England) or 6 (The Evolution of Europe). For such students a normal first year programme is English 2 (A General Introduction to English Literature), Philosophy 1 (Introduction to Philosophy), History 3 (The North Atlantic Community) or 5 (The Evolution of England) or 6 (The Evolution of Europe) and 12 (Mediæval Europe), and a course in the minor. Students who expect to choose the Canadian and Commonwealth option, as set forth below, are advised to take History 3; those likely to select the British and European group are advised to take History 5 or History 6.

Honours in History may be taken either in British and European History or in Canadian and Commonwealth History.

(a) The Major.

The major is made up as follows:

BRITAIN AND EUROPE

History 3 (The North Atlantic Community) or  
History 5 (The Evolution of England) or  
History 6 (The Evolution of Europe)  
History 12 (Mediæval Europe)

History 13 (The British Empire and Commonwealth)

History 18a (England under the Tudors)

History 18b (England under the Stuarts)

History 19 (Modern Britain)

History 27 (National and International Europe)

One full course selected from  
History 11a (The United States)

History 16 (Mediæval Britain)

History 24a (The Renaissance)

History 24b (The Reformation)

CANADA AND  
THE COMMONWEALTH

History 3 (The North Atlantic Community) or

History 5 (The Evolution of England) or

History 6 (The Evolution of Europe)

History 12 (Mediæval Europe)

History 13 (The British Empire and Commonwealth)

History 18a (England under the Tudors)

History 18b (England under the Stuarts)

History 19 (Modern Britain)

History 20 (The History of Canada to 1818)

History 28 (The History of Canada since 1818)

With Greek and Roman History 4 (A survey of Greek and Roman society) or Latin 2 (Translation and interpretation of prescribed texts, sight translation, prose composition). The relevance of Latin will be clear to students interested in the mediæval period.

History Reading Course 6 (The Study and Interpretation of History) and two other reading courses selected from History Reading Course 1\* (The Middle Ages), History Reading Course 3 (British Foreign Policy), History Reading Course 4 (Anglo-American and Canadian-American Relations), History Reading Course 5 (Geographical Discovery and Exploration).

(b) The Minor.

The minor may be:

English 2 or 5, 10, any two chosen from 15, 19, 20, 22, or French 2, 10, 11, 14, or

German 2, 10, 12, 14, or

Philosophy 1, 10, 27 and two advanced courses (see page 205, section 6), or

Economics 4, 10, 12, and two further courses (Mathematics 3a may be offered as a half-course in Economics), or Political Science: Politics 2, 30, 31, and two courses in Politics selected from 32, 36, 37, 39.

(c) Compulsory general courses to complete the work for a degree:

Philosophy 1, English 2, a science or a language. If the candidate has Grade XIII standing in both a language and a science he may use the third general course as a free option.

(d) Two general examinations in History.

3. High School Teaching Certificate in History.

Candidates for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, in History at the Ontario College of Education take the regular Honours Course in History with a minor in Political and Economic Science made up of Economics 4 (Introduction to Economics), Politics 2 (Introduction to Politics), Economics 10 (Principles of Economics), and two further courses in Politics and Economics. Geology 1 (Physiography and general Geology) is also prescribed, and History Reading Courses 5 (Geographical Discovery and Exploration) and 6 (The Study and Interpretation of History) are included among the reading courses.

#### 4. Minors in History.

- (a) A minor in History normally consists of either History 3 (The North Atlantic Area), or 5 (The Evolution of England) or 6 (The Evolution of Europe), 12 (Mediæval Europe), 13 (The British Empire and Commonwealth) or two of History 14a (The United States), 24a (The Renaissance) and 24b (The Reformation) or 19 (Modern Britain), and one other course numbered over 10.
- (b) Candidates for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, in English at the Ontario College of Education take the regular Honours Course in English with a minor in Social History made up as follows: History 3 (The North Atlantic Area) or History 5 (The Evolution of England), or History 6 (The Evolution of Europe), 12 (Mediæval Europe), and two courses to be selected from History 14a (The United States), 16 (Mediæval England), 18a England under the Tudors), 18b (England under the Stuarts), 19 (Modern Britain), 24a (The Renaissance), 24b (The Reformation), 28 (The History of Canada since 1818). See *Course for the Teaching Certificate in English*, page 113.

#### 5. General Honours.

Students selecting History as one of their subjects for General Honours will take the courses prescribed for a minor in History (see 4 (a) above), with the addition of Reading Course 6 (The Study and Interpretation of History).

6. For information on scholarships in History, see pages 72 and 73.

### COURSES IN HISTORY

#### HISTORY 3. THE NORTH ATLANTIC COMMUNITY.

The evolution of Canada and the United States in the North Atlantic Community.

Basic Texts: A. R. M. Lower, *Colony to Nation: A History of Canada* (Longmans); and another to be assigned, in American history.

Extramural students are expected to acquire additional books, a list of which will be sent on request.

*Monday, Wednesday, Friday at 11.*

Professor Lower and Professor Gibson.

## HISTORY 4. GREEK AND ROMAN HISTORY.

This course is given by the Department of Classics. The prescription appears on page 151.

## HISTORY 5. THE EVOLUTION OF ENGLAND.

A study of free institutions.

Basic texts: G. M. Trevelyan, *History of England*, Third edition (Longmans); W. E. Lunt, *History of England*, Third edition (Harper); G. B. Adams, *Constitutional History of England*, Revised edition (Holt). Other reading to be assigned.

Monday, Wednesday, Friday at 10.

Professor Smith and Professor Gibson.

## HISTORY 6. THE EVOLUTION OF EUROPE.

An historical introduction to contemporary Europe.

Basic texts: H. A. L. Fisher, *A History of Europe* (Longmans); J. H. Robinson and J. T. Shotwell, *The History of Western Europe* (Brief edition, revised and enlarged, Ginn); J. H. Robinson, *Readings in European History*, Vols. I and II (Ginn); J. H. Breasted, C. F. Huth, and S. B. Harding, *European History Atlas* (Denoyer-Geppert Co., Chicago). Other reading to be assigned.

Extramural students are expected to acquire additional books.

Tuesday and Thursday at 11, Wednesday at 2.30.

Professor Smith and Professor Harrison.

## HISTORY 11a. THE UNITED STATES.

Studies in the national period.

Monday and Friday at 9, Wednesday at 1.30.

Professor Gibson.

## HISTORY 12. MEDIAEVAL EUROPE.

A study of the evolution of Western civilization during this period.

Basic texts: Carl Stephenson, *Mediaeval History* (Harper); J. B. Ross and M. M. McLaughlin, *The Mediaeval Reader* (Macmillan). Other reading to be assigned.

Wednesday and Friday at 10, Tuesday at 1.30.

Professor Smith.



## HISTORY 13. THE BRITISH EMPIRE AND COMMONWEALTH.

Basic texts: J. A. Williamson, *The British Empire and Commonwealth* (Macmillan) or C. E. Carrington, *The British Overseas* (Cambridge University Press). Other reading to be assigned.

Monday, Wednesday, Friday at 10.

Professor Gibson and Professor Lower.

## HISTORY 16. MEDIAEVAL ENGLAND.

A seminar in the constitutional and cultural aspects of the subject to 1485, open to students who have been admitted to honours.

Basic texts: G. M. Trevelyan, *History of England* (Longmans); J. E. A. Jolliffe, *The Constitutional History of Mediæval England* (Macmillan); C. Stephenson and F. G. Marcham, *Documents of English Constitutional History*, Revised edition (Harper). Other reading to be assigned.

Tuesday and Thursday at 10, Friday at 1.30.

Professor Smith.

## HISTORY 18a. ENGLAND UNDER THE TUDORS.

Basic texts: S. T. Bindoff, *Tudor England* (Penguin Books); C. Stephenson and F. G. Marcham, *Documents of English Constitutional History* (Harper); J. B. Black, *The Reign of Elizabeth* (Oxford University Press); D. L. Keir, *A Constitutional History of Modern Britain*, Revised edition (Macmillan); G. M. Trevelyan, *English Social History* (Longmans). Other reading to be assigned.

Note: This course is open only to students who have been admitted to honours.

Tuesday and Thursday at 2.30 - 4.

Professor Harrison.

## HISTORY 18b. ENGLAND UNDER THE STUARTS.

Basic texts: G. M. Trevelyan, *England Under the Stuarts* (Methuen); C. Stephenson and F. G. Marcham, *Documents of English Constitutional History* (Harper); D. L. Keir, *A Constitutional History of Modern Britain*, Revised edition (Macmillan); G. M. Trevelyan, *English Social History* (Longmans). Other reading to be assigned.

Note: This course is open only to students who have been admitted to honours.

Tuesday and Thursday at 2.30 - 4.

Professor Gibson.

## HISTORY 19. MODERN BRITAIN.

An historical introduction to the politics and problems of contemporary Britain.

Basic texts: Gilbert Slater, *The Growth of Modern England* (Macmillan); Sir John Marriott, *Modern England, 1885-1945* (Saunders); D. L. Keir, *A Constitutional History of Modern Britain*, Revised edition (Macmillan). Other reading to be assigned.

Note: This course is open only to students who have been admitted to honours.

*Monday, 2.30-4.30, Wednesday at 9.*

Professor Harrison.

## HISTORY 20. THE HISTORY OF CANADA TO 1818.

This course will attempt an explanation of French Canada in the history of Canada. A reading knowledge of French is desirable.

Reading to be assigned.

*Tuesday, Thursday, Saturday at 10.*

Professor Lower.

## HISTORY 24a. THE RENAISSANCE.

*Tuesday and Thursday at 10, Friday at 1.30.*

Not offered in 1952-53.

## HISTORY 24b. THE REFORMATION.

Reading to be assigned.

*Tuesday and Thursday at 10, Friday at 1.30.*

Not offered in 1952-53.

## HISTORY 27: POLITICS 34. NATIONAL AND INTERNATIONAL EUROPE.

An historical approach to the problems of contemporary Europe.

Basic texts: A. J. Grant and H. W. V. Temperley, *Europe in the Nineteenth and Twentieth Centuries, 1789-1950*, 6th ed., revised and edited by Lillian M. Penson (Longmans); E. H. Carr, *The Twenty Years' Crisis, 1919-1939: An Introduction to the study of International Relations* (Macmillan); Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace* (McClelland and Stewart). Other readings to be assigned.

*Monday, Wednesday, Friday at 11.*

Professor Harrison.

## HISTORY 28. THE HISTORY OF CANADA SINCE 1818.

A seminar combining discussion of historical methods and bibliography, and problems of interpretation in Canadian history, with reports by students on selected topics.

Readings on the period will be assigned, and other material in the University's collection of documents will be used in preparing the reports.

*Tuesday and Thursday at 3.30.*

Not offered in 1952-53.

## HISTORY 30. THE GRADUATE SEMINAR.

A seminar for graduate students on the study and writing of History.

Two hours a week at times to be arranged.

Professor Lower.

## READING COURSES IN HISTORY:

## R 1. THE MIDDLE AGES.

G. G. Coulton, *The Mediæval Scene* (Cambridge University Press); Eileen Power, *Mediæval People* (Penguin Books); J. Huizinga, *The Waning of the Middle Ages* (Arnold); Henri Pirenne, *Mediæval Cities* (Princeton University Press); C. H. Haskins, *The Rise of the Universities* (Holt); C. G. Crump and E. F. Jacobs (Ed.), *The Legacy of the Middle Ages* (Oxford University Press); F. J. C. Hearnshaw, *The Social and Political Ideas of Some Great Mediæval Thinkers* (Harrap); Henri Pirenne, *A History of Europe from the Invasions to the Sixteenth Century* (Norton).

## R 3. BRITISH FOREIGN POLICY.

R. W. Seton-Watson, *Britain in Europe, 1789-1914: A Survey of Foreign Policy* (Macmillan); Sir John Tilley and Stephen Gaselee, *The Foreign Office* (Putnam); Harold Nicolson, *Diplomacy* (Nelson); A. F. Pribram, *England and the International Policy of the European Great Powers, 1871-1914* (Oxford University Press); G. M. Trevelyan, *Grey of Falloden* (Macmillan); Viscount Grey, *Twenty-five Years* (Hodder and Stoughton); Harold Nicolson, *Sir Arthur Nicolson: First Lord Carnock* (Macmillan); Viscount Haldane, *Autobiography* (Hodder and Stoughton); Winston Churchill, *The World Crisis, 1911-1914, Vol. I* (Scribner's); James Joll (Ed.), *Britain and Europe: Pitt to Churchill, 1793-1940* (Nicholas Kaye).

## R 4. ANGLO-AMERICAN AND CANADIAN-AMERICAN RELATIONS.

J. B. Brebner, *North Atlantic Triangle* (Ryerson); R. B. Mowat, *The Diplomatic Relations of Great Britain and the United States* (Longmans); L. M. Gelber, *The Rise of Anglo-American Friendship: A Study in World Politics, 1893-1906* (Oxford University Press); Edgar W. McInnis, *The Unguarded Frontier: A History of Canadian-American Relations* (McClelland and Stewart); H. L. Keenleyside, *Canada and the United States* (Crofts); P. E. Corbett, *The Settlement of Canadian-American Disputes* (Ryerson); W. B. Munro, *American Influences on Canadian Government* (Macmillan); Sir Robert Falconer, *The United States as a Neighbour* (Cambridge University Press); *Conference on Canadian-American Affairs, 1935: Proceedings*, edited by W. W. McLaren, A. B. Corey, R. G. Trotter (Ginn), (The section on "The Historical Background of Present Problems and Attitudes"). *Conference on Canadian-American Affairs, 1941: Proceedings*, edited by R. G. Trotter, A. B. Corey (Ginn) (pages 140-149, 184-194). B. K. Sandwell, *Canada and United States Neutrality*; and R. G. Trotter, *North America and the War* (Oxford Pamphlets on World Affairs); R. McG. Dawson, *Canada in World Affairs, 1939-1941* (Oxford University Press for the Canadian Institute of International Affairs); Vincent Massey, *On Being Canadian* (Dent).

## R 5. GEOGRAPHICAL DISCOVERY AND EXPLORATION.

J. N. L. Baker, *A History of Geographical Discovery and Exploration* (New edition, 1937, Clarke, Irwin); J. E. Gillespie, *A History of Geographical Discovery, 1400-1800* (Clarke, Irwin); J. Holland Rose, *Man and the Sea: Stages in Maritime and Human Progress* (Heffer and Sons, Cambridge, England); Vilhjalmur Stefansson, *Great Adventures and Explorations* (Longmans); J. B. Brebner, *The Explorers of North America, 1492-1806* (Macmillan); J. E. Morison, *Admiral of the Ocean Sea: A Life of Christopher Columbus* (Little, Brown).

It is not expected that the student will attempt to memorize the whole mass of factual detail in Baker; but it should be carefully read in its entirety, with attention mainly on those phases of exploration that are also illustrated on the maps. Gillespie's brief volume will be useful as an introductory and supplementary sketch, but should not be considered as being at all a substitute for the ampler material in the other volumes named.



## R 6. THE STUDY AND INTERPRETATION OF HISTORY.

Allan Nevins, *The Gateway to History* (Heath); A. L. Rowse, *The Use of History* (Hodder and Stoughton); R. G. Collingwood, *The Idea of History* (Oxford University Press); H. Butterfield, *Christianity and History* (Clarke, Irwin); Henri Sée, *The Economic Interpretation of History* (Adelphi); G. M. Trevelyan, *An Autobiography and Other Essays* (Longmans, Green); Arnold J. Toynbee, *A Study of History: Abridgement of Volumes I-VI* by D. C. Somerville (Oxford University Press); Emery Neff, *The Poetry of History: The Contribution of Literature and Literary Scholarship to the Writing of History Since Voltaire* (Columbia University Press); Pieter Geyl, *Napoleon: For and Against* (Clarke, Irwin); C. H. Williams, *The Modern Historian* (Thomas Nelson); J. R. M. Butler, *The Present Need for History* (Cambridge University Press); Joseph R. Strayer (Ed.), *The Interpretation of History* (Princeton University Press); Herbert Butterfield, *The Whig Interpretation of History* (Clarke, Irwin); E. L. Woodward, *British Historians* (Collins).

## GRADUATE COURSES

Information on facilities for graduate work in History is published in the Calendar of Graduate Studies.

## HISTORY, GREEK AND ROMAN, SEE CLASSICS.

## INDUSTRIAL RELATIONS

J. C. Cameron, M.Com., PROFESSOR

C. H. Curtis, M.A., ASSOCIATE PROFESSOR

The Department of Industrial Relations was established in 1944 to continue the work begun by the Industrial Relations Section (a section of the School of Commerce and Administration) in 1937.

The department

1. (a) collects data respecting policies, programmes and experience in employer-employee relations, keeps the material up-to-date and classifies it so that it is readily available to students, employers, labour organizations and governments;

- (b) collects current information in the industrial and social security fields.
2. keeps in touch with industrial and labour union organizations so that it may study actual developments.
  3. gives instruction to students in the Department of Political and Economic Science, the School of Commerce, the Faculty of Applied Science, and the School of Nursing.
  4. prepares reports on subjects of immediate and vital interest.
  5. holds conferences and short courses for business executives, personnel managers, industrial relations managers and labour leaders.

Thus the department combines the work of a library, a clearing house of information, and a research bureau. It also participates in the University programme of instruction (intramural and extra-mural) and provides a centre for the discussion of recent developments.

Commerce students who wish to specialize in Industrial Relations will take the following courses offered by the Department of Political and Economic Science and the School of Commerce:

Economics 23—Industrial Relations.

Commerce 50—Industrial Organization and Management.

Commerce 59—Thesis in the field of Industrial Relations.

The department is prepared to give special courses to students who wish to do advanced work in industrial relations.

For information about scholarships in Industrial Relations see page 76.

For information about professional courses write to the head of the department.

ITALIAN LANGUAGE AND LITERATURE, SEE SPANISH LANGUAGE  
AND LITERATURE.

LATIN LANGUAGE AND LITERATURE, SEE CLASSICS.

## MATHEMATICS

- R. L. Jeffery, M.A., Ph.D., D.Sc., F.R.S.C., THE N. F. DUPUIS PROFESSOR  
OF MATHEMATICS
- N. Miller, M.A., Ph.D., PROFESSOR
- A. Vibert Douglas, M.B.E., M.Sc., Ph.D., F.R.A.S., ACTING PROFESSOR  
OF ASTRONOMY
- F. M. Wood, M.A., B.Sc., PROFESSOR
- I. Halperin, M.A., Ph.D., ASSOCIATE PROFESSOR
- G. L. Edgett, M.A., Ph.D., ASSOCIATE PROFESSOR
- H. W. Ellis, M.A., Ph.D., ASSISTANT PROFESSOR
- R. J. Lockhart, B.A., H. F. Trotter, B.A., TEACHING FELLOWS

### REGULATIONS AND ANNOUNCEMENTS

1. Mathematics 1, 2, 3a and 7b, and Astronomy 1 are pass courses, and are open to all who have passed the prerequisites.

2. Students offering Mathematics as one of the subjects of concentration on the Pass Course ordinarily take Mathematics 2 (Differential and integral calculus), 3a (Applied statistics), 7b (Mathematics of investment) and Astronomy 1 (Descriptive astronomy). If they maintain satisfactory standing in Mathematics 2, they may, with the consent of the department, take honours courses in Mathematics in place of 3a, 7b and Astronomy 1. Students who have obtained credit in Mathematics 2, 10a, and 11b, and are not proceeding with the Honours Course, may count these towards a group for the pass degree.

3. Students are advised not to attempt an honours course in Mathematics unless they have obtained high standing in the preceding pass course. Grade B in such a course is the minimum standing on which a student may proceed.

4. Students who have at least Grade B in Mathematics 1, or second class in the Mathematics of Honour Matriculation, and who intend to enter the Honours Course in Mathematics, should take courses 2 (Differential and integral calculus), 10a (Algebra) and 11b (Analytic geometry) in the same year. They must obtain a standing of at least Grade B in these courses if they wish to proceed.

5. For information about the course of study leading to the Interim High School Assistant's Certificate, Type A, in Mathematics and in Mathematics and Physics at the Ontario College of Education, see page 113.

## 6. The Honours Course in Mathematics.

Candidates planning to take the Honours Course in Mathematics are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), Physics, a language, a fifth subject which may be a second science, a second language or History. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

## (a) The Major.

The major is made up as follows:

- Mathematics 2 (Differential and integral calculus)
- Mathematics 10a (Algebra)
- Mathematics 11b (Analytic geometry)
- Mathematics 12a (Determinants and theory of equations)
- Mathematics 13 (Calculus and differential equations)
- Mathematics 15b (Analytic solid geometry)
- Mathematics 19 (Advanced calculus)
- Mathematics 20 (Probability and statistics)
- Mathematics 22 (Theory of functions of a complex variable)
- Mathematics 23 (The calculus of finite differences, and life contingencies)
- Mathematics Reading Course 1
- Mathematics Reading Course 2
- Mathematics Reading Course 3

On the advice of the department graduate course 101, or 103, may replace 23.

## (b) The Minor.

The minor may be:

Economics 4, 10, 12, and two further courses (Mathematics 3a may be offered as a half-course in Economics), or

Physics 2, 11, 10b, 12a, 13b, 14a.

A candidate who wishes to take some other subject as minor, may do so with the consent of the Department of Mathematics.

## (c) Compulsory general courses to complete the work for a degree:



English 2, Philosophy 1, a language. If the candidate has Grade XIII standing in a language he may take a free option as the third general course.

(d) Two general examinations in Mathematics.

7. The work for a major in Mathematics is normally covered in four years provided that Mathematics 1 or the Mathematics of Honour Matriculation has been taken previously. The normal distribution of the work over four years is as follows:

1st year — Mathematics 2, 10a, 11b.

2nd year — Mathematics 13, 12a, 15b, and Reading Course 1.

3rd year — Mathematics 19, 20 or 23, and Reading Course 2.

4th year — Mathematics 22, 20 or 23, and Reading Course 3.

It is advisable for the student to aim at completing the minor subject at least one year before the time of graduation.

8. Minors in Mathematics.

When Mathematics is the minor associated with Physics as major, the minor consists of Mathematics 2 (Differential and integral calculus), 10a (Algebra), 11b (Analytic geometry), 13 (Calculus and differential equations), 19 (Advanced calculus).

When Mathematics is the minor associated with Economics, Philosophy or Psychology as major, the minor consists of Mathematics 2 (Differential and integral calculus), 10a (Algebra), 11b (Analytic geometry), 13 (Calculus and differential equations), and one of 19 (Advanced calculus), 20 (Probability and statistics).

9. When Mathematics is one of the three special subjects on the General Honours Course (page 109), the prescription of work is as follows: Mathematics 2 (Differential and integral calculus), 10a (Algebra), 11b (Analytic geometry), 13 (Calculus and differential equations), 12a (Determinants and theory of equations), 15b (Analytic solid geometry), Reading Course 1.

10. For information in regard to scholarships in Mathematics, see pages 76-77.

#### COURSES OF INSTRUCTION

MATHEMATICS 1. TRIGONOMETRY, ANALYTIC GEOMETRY, AND ALGEBRA.

McGraw-Hill, *Five-place Logarithms and Trigonometric Tables*. Other texts to be prescribed.

Tuesday, Thursday, Saturday at 9.

## MATHEMATICS 2. DIFFERENTIAL AND INTEGRAL CALCULUS.

Prerequisite: Mathematics 1.

R. L. Jeffery, *Elementary Calculus*.

Monday, Wednesday, Friday at 9.

Tuesday, Thursday, Saturday at 10.

Professors Jeffery and Halperin.

## MATHEMATICS 3a. APPLIED STATISTICS.

For second year students in Commerce, and for Honours students in Biology, Economics and Psychology.

Prerequisite: Senior Matriculation in Mathematics.

Mode, *Elements of Statistics*, Second Edition (Prentice-Hall).

Monday, Wednesday, Friday at 10.

Professor Edgett.

## MATHEMATICS 7b. MATHEMATICS OF INVESTMENT.

Prerequisite: Mathematics 1.

Hart, *Mathematics of Investment*, with tables (Heath).

Monday, Wednesday, Friday at 10.

Professor Edgett.

## ASTRONOMY 1. A COURSE IN DESCRIPTIVE ASTRONOMY.

Baker, *Astronomy* (van Nostrand), 4th ed.; Kingston, *Star Guide*.

Monday, Wednesday, Friday at 9.

Dean Douglas.

## MATHEMATICS 10a. ALGEBRA.

Prerequisite: Mathematics 1.

Rosenbach and Whitman, *College Algebra* (Ginn), supplemented by mimeographed notes.

Monday, Wednesday, Friday at 11.

Professor Miller.

## MATHEMATICS 11b. ANALYTIC GEOMETRY.

Sisam, *Analytic Geometry* (Holt), with supplementary material.

Monday, Wednesday, Friday at 11.

Professor Miller.

MATHEMATICS 12a. DETERMINANTS AND THEORY OF EQUATIONS.

Prerequisites: Mathematics 2, 10a.

Monday, Wednesday, Friday at 8.

Professor Halperin.

MATHEMATICS 13. CALCULUS AND DIFFERENTIAL EQUATIONS.

Granville, Smith and Longley, *Elements of Differential and Integral Calculus*, revised edition (Ginn); Morris and Brown, *Differential Equations*, revised edition (Prentice-Hall).

Tuesday, Thursday, Saturday at 8.

Professor Ellis.

MATHEMATICS 15b. ANALYTIC SOLID GEOMETRY.

Open to students who have taken Mathematics 12a.

Monday, Wednesday, Friday at 8.

Professor Halperin.

MATHEMATICS 19. ADVANCED CALCULUS.

Tuesday, Thursday, Saturday at 8.

Professor Miller.

MATHEMATICS 20. PROBABILITY AND STATISTICS.

Uspensky, *Introduction to Mathematical Probability* (McGraw Hill); Hoel, *Introduction to Mathematical Statistics* (Wiley).

Tuesday, Thursday, Saturday at 9.

Professor Edgett.

MATHEMATICS 22. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE.

*Introduction to Complex Variables and Applications*, by R. V. Churchill (McGraw-Hill).

Monday, Wednesday, Friday at 9.

Professor Jeffery and Professor Wood.

MATHEMATICS 23. THE CALCULUS OF FINITE DIFFERENCES, AND LIFE CONTINGENCIES.

Freeman, Part II *Actuarial Mathematics* (The Actuarial Society of America); Fort, *Finite Differences* (Oxford University Press); Spurgeon, *Life Contingencies* (The Actuarial Society of America).

Tuesday, Thursday, Saturday at 9.

Professor Edgett.

## READING COURSES IN MATHEMATICS:

- R 1. J. S. Frame, *Solid Geometry* (McGraw-Hill). A mimeographed set of problems will be supplied by the department. From his reading the student should acquire a knowledge of the theorems of the subject and skill in the solution of problems.
- R 2. Courant and Robbins, *What is Mathematics?* (Oxford University Press).
- R 3. H. N. Wright, *Theory of Numbers* (Wiley).

## GRADUATE COURSES

For information about graduate courses in Mathematics, see the Calendar of Graduate Studies.

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## MUSIC

Graham George, Mus.D., ASSOCIATE PROFESSOR (on leave of absence, 1952-53)

J. Lansing MacDowell, B.A., SESSIONAL LECTURER 1952-53.

## REGULATIONS AND ANNOUNCEMENTS

Music 1, 2 and 3 may be counted towards the degree of Pass B.A. either as a group or as individual free options; towards the degree of Honours B.A. as free options. Music 1 is normally prerequisite to Music 2 and Music 3, but students who have passed a recognized course outlining musical history may be admitted to Music 2 or 3.

On recommendation of the departments concerned, students may apply to the Faculty of Arts for permission to combine courses in Fine Arts (Music, Drama, Art) to make up a group towards the degree of Pass B.A. (N.B. Students may not register in a group of combined Fine Arts courses without previous consent of the departments concerned.)

## COURSES OF INSTRUCTION

## MUSIC 1. AN OUTLINE OF THE HISTORY OF MUSIC.

A study of some important phases in the development of musical forms and styles. Origins; sixteenth century polyphony and the music of the dance; the developments of the seventeenth cen-



ture; Bach and his contemporaries; the music of Haydn, Mozart and Beethoven; the Romantic period. This study is carried on aurally, and technical knowledge of music is not a prerequisite.

A three-hour listening period per week is provided to give students opportunity for analytical listening, Thursday, 2.30 - 4.30.

Text: *The Structure of Music*, R. O. Morris (Oxford).

*Monday at 2.30, Wednesday and Friday at 4.30.*

## MUSIC 2. THE VIENNESE PERIOD.

An aural study of the music of Haydn, Mozart and Beethoven, with special attention to the principles of key-structure which underlie their work.

A two-hour listening period per week is provided for analytical listening, time to be arranged.

Text: *Beethoven*, D. F. Tovey (Oxford).

Hours to be arranged.

## MUSIC 3. THE 19TH AND 20TH CENTURIES.

(a) An aural study of the music of the nineteenth century, showing the alteration of emphasis from expression by means of structure to expression through harmonic and instrumental colour.

(b) The gradual dissipation of the sense of key-centre, and the emergence of the twelve-tone scale as the basis of a new group of idioms. Works of Schoenberg, Bartok, Hindemith and others are discussed as representing the characteristics of contemporary style.

A two-hour listening period per week is provided for analytical listening.

Text: *A Study of Twentieth Century Harmony*, Mosco Carner (Joseph Williams).

Hours to be arranged.

## PHILOSOPHY

A. R. C. Duncan, M.A., THE JOHN AND ELLA G. CHARLTON PROFESSOR  
OF PHILOSOPHY

H. M. Estall, M.A., Ph.D., ASSOCIATE PROFESSOR

LECTURER—To be appointed.

### REGULATIONS AND ANNOUNCEMENTS

1. Philosophy 1 (Introduction to philosophy) is prerequisite to all later courses in Philosophy except Philosophy 5 (Types of philosophy).

Philosophy 1 is ordinarily taken in the first year. If, however, it cannot be worked into the first year programme, students will take instead Philosophy 5 in a later year.

2. Students choosing Philosophy as one of the main subjects on a Pass Course take Philosophy 1 (Introduction to philosophy), 5 (Types of philosophy), and 7 (History of philosophy).

3. For information in regard to scholarships in Philosophy, see page 73.

4. The Honours Course in Philosophy.

Candidates planning to take the Honours Course in Philosophy are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), a language, a science, and a fifth subject which may be a second language, a second science or History. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they may lack.

(a) The Major.

The major is made up as follows:

Philosophy 1 (Introduction to philosophy)  
Psychology 2 (An elementary survey of mental life)  
Philosophy 10 (Problems of philosophy)  
Philosophy 12 (History of ancient philosophy)  
Philosophy 14 (History of modern philosophy)  
Philosophy 27 (Moral philosophy)  
Philosophy 29 (Logic)

Three of Philosophy 15 (Recent philosophy)  
Philosophy 23 (Political philosophy)  
Philosophy 25 (Aesthetics)  
Philosophy 31 (Seminar course)

Three of the five reading courses.

Philosophy 12 (History of ancient philosophy) and 14 (History of modern philosophy), and Philosophy 27 (Moral philosophy) and 29 (Logic) are offered in alternate years.

Philosophy 31 differs in content from year to year and may be taken twice.

(b) The Minor.

The minor may be:

History 3, 12, 13 or 19, and one other course numbered over 10, or

Politics 2, 30, 31, and two of 32, 36, 37, 39, or

Psychology 2, 10a, 10b, 11, and two other courses in Psychology, or

Mathematics 2, 10a, 11b, 13, and one of 19, 20.

Other minors may be selected in consultation with the department.

(c) Compulsory general courses to complete the work for degree.

With History, Mathematics or Psychology as minor: English 2, a language or a science. If the candidate has Grade XIII standing in both a language and a science he may take a free option as the second general course.

With Politics as minor: English 2.

(d) Two general examinations in Philosophy.

5. The Course in Honours Philosophy requires four years and is normally arranged as follows:

First Year      Philosophy 1, Psychology 2.

Second Year    Philosophy 10, 12 or 14, a reading course, Psychology 2 if not already taken.

Third Year      Philosophy 12 or 14 not taken in the second year, 27 or 29, an optional course in Philosophy, a reading course.

Fourth Year    Philosophy 27 or 29 not taken in the third year, two optional courses in Philosophy, a reading course.

6. A minor in Philosophy is ordinarily Philosophy 1, 10, 27 and two full courses chosen from the following: 12, 14, 15, 23, 25, 29, 31, one of which must be either 12, 14, or 15.

## COURSES OF INSTRUCTION

## PHILOSOPHY 1. INTRODUCTION TO PHILOSOPHY.

A general introduction to philosophy, in which special attention will be paid to the nature of proof, the criterion of truth, the determination of standards of conduct, and the function of philosophy in the modern world.

Text-books: Stebbing, *A Modern Elementary Logic* (Methuen); Mill, *Utilitarianism* (Liberal Arts Press); Macmurray, *Interpreting the Universe* (Faber and Faber).

Monday, Wednesday, Friday at 9.

Professor Duncan.

## PHILOSOPHY 5. TYPES OF PHILOSOPHY.

An introductory survey of the main philosophical movements in the western world, together with an account of the main branches of philosophical study, especially logic.

This course is not open to freshmen.

Text-books: Beardsley, *Practical Logic* (Prentice-Hall); Whiteley, *Introduction to Metaphysics* (Methuen).

Monday, Wednesday, Friday at 9.

Professor Estall.

## PHILOSOPHY 7. HISTORY OF PHILOSOPHY.

A general account of the history of philosophy from the Greeks to the present day. Attention will be concentrated on a few of the more outstanding figures.

First term: the philosophy of the Greeks and its impact on mediæval Christendom.

Second term: the development of modern philosophy and its interaction with scientific thought.

Text-book: Stallknecht and Brumbaugh, *The Spirit of Western Philosophy* (Appleton-Century).

Monday, Wednesday, Friday at 11.

Professors Duncan and Estall.

## PHILOSOPHY 10. PROBLEMS OF PHILOSOPHY.

A study of some of the major problems in the field of philosophy. First term: the theory of knowledge. Second term: the theory of existence.

Text-book: to be announced.



Recommended for study but not for purchase: N. Kemp Smith, *Prolegomena to an Idealist Theory of Knowledge*; A. E. Taylor, *Elements of Metaphysics*; John Laird, *A Study in Realism*; A. J. Ayer, *Language, Truth, and Logic*.

Monday, Wednesday, Friday at 10.

Lecturer.

#### PHILOSOPHY 12. HISTORY OF ANCIENT PHILOSOPHY.

A study of the four main periods of classical philosophy. First term: the pre-Socratics, Socrates, and Plato. Second term: Plato, Aristotle, and the post-Aristotelians. One of the main objects of this course will be to trace the growth of the problems which traditionally constitute the field of philosophical study and to study the manner of their transmission to the modern world.

Text-books: Milton Nahm, *Selections from Early Greek Philosophy* (Appleton-Century-Crofts); *Dialogues of Plato*, translated by Jowett (Random House); Aristotle (*Basic Works*, Random House).

Monday, Wednesday, Friday at 3.30.

Professor Duncan.

#### PHILOSOPHY 14. HISTORY OF MODERN PHILOSOPHY.

A study of modern philosophy from Bacon to Kant with special attention to the opposition between rationalists and empiricists.

Text-book: T. V. Smith and Greene, *Descartes to Kant*.

Recommended for study but not for purchase: Mellone, *The Dawn of Modern Thought*; C. R. Morris, *Locke, Berkeley, Hume*; A. E. Burt, *The Metaphysical Foundations of Modern Science*; E. W. Strong, *Procedures and Metaphysics*; N. Kemp Smith, *Philosophy of David Hume*; W. H. Walsh, *Reason and Experience*; A. C. Ewing, *A Short Commentary on Kant's Critique of Pure Reason*.

Not offered in 1952-53.

#### PHILOSOPHY 15. RECENT PHILOSOPHY.

A study of the main philosophical currents in the western world during the last hundred years. Among those whose writings will be considered are: Hegel, Marx, Kierkegaard, J. S. Mill, Nietzsche, Bergson, James, Dewey, Whitehead, Russell.

Text-books: to be announced.

Monday, Wednesday, Friday at 1.30.

Professor Estall.

## PHILOSOPHY 23. POLITICAL PHILOSOPHY.

An examination of the principal concepts and arguments employed in political writings, past and present.

Text-books: Foster, *Masters of Political Thought*, Vol. I (Houghton Mifflin); Jones, *Masters of Political Thought*, Vol. II (Houghton Mifflin); Spahr, *Readings in Recent Political Philosophy* (Macmillan).

Not offered in 1952-53.

## PHILOSOPHY 25. AESTHETICS.

An examination of the arguments used in aesthetic criticism.

Not offered in 1952-53.

## PHILOSOPHY 27. MORAL PHILOSOPHY.

The general approach will be as follows:

- (a) Critical study of the historical development of moral and social theory.
- (b) Examination of ethical issues in contemporary life.

Not offered in 1952-53.

## PHILOSOPHY 29. LOGIC.

A study of the problems of demonstrative and problematic inference.

Text-books: Cohen and Nagel, *Logic and Scientific Method* (Harcourt, Brace); Kneale, *Induction and Probability* (Oxford University Press).

Monday, Wednesday, Friday at 2.30.

Professor Estall and lecturer.

## PHILOSOPHY 31.

Systematic study of the works of some one philosopher or school. A different topic will be selected each year.  
1952-53: The Philosophy of Immanuel Kant.

Text-books: Kant, *The Critique of Pure Reason* (Macmillan); Kant, *The Critique of Practical Reason* (University of Chicago Press); Kant, *The Critique of Judgment* (Macmillan).

Monday, Wednesday, Friday at 10.

Professor Duncan.

## READING COURSES IN PHILOSOPHY.

## R 1. METAPHYSICS.

Pepper, *World Hypotheses*; Collingwood, *Essay in Metaphysics*; Stout, *Mind and Matter*; Ryle, *Concept of Mind*.

## R 2. ETHICS.

Ross, *Foundations of Ethics*; Leon, *Ethics of Power*; Schlick, *Problems of Ethics*; Bergson, *Two Sources of Morality and Religion*.

## R 3. LOGIC.

Mill, *System of Logic* (Books III and VI); Bosanquet, *Essentials of Logic*; Poincaré, *Foundations of Science*; Whitehead, *Introduction to Mathematics*.

## R 4. LATER PHILOSOPHY OF PLATO.

Cornford, *Plato and Parmenides*; A. E. Taylor, *Plato's Parmenides* (translation and introduction); Cornford, *Plato's Theory of Knowledge*; Hackforth, *Plato's Examination of Pleasure*; Hardie, *A Study in Plato*.

## R 5. AESTHETICS.

Carritt, *Introduction to Aesthetics*; Croce, *Essentials of Aesthetics*; Collingwood, *Principles of Art*; Alexander, *Beauty and Other Forms of Value*; Pepper, *Principles of Art Appreciation*.

Note 1: Substitutions in reading courses may be arranged for in consultation with the department to meet the special needs of individual students.

Note 2: Politics 32 (Modern Political Thought) may be substituted for R 2.

Note 3: The examination in at least one of the reading courses will take the form of an essay of approximately 8,000 words.

## GRADUATE COURSES

For information about graduate courses in Philosophy, see the Calendar of Graduate Studies.

## PHYSICAL AND HEALTH EDUCATION

F. L. Bartlett, B.A., PROFESSOR OF PHYSICAL AND HEALTH EDUCATION  
AND DIRECTOR OF THE SCHOOL OF PHYSICAL AND HEALTH EDUCATION

J. F. Edwards, M.A. (P.E.), ASSOCIATE PROFESSOR

F. Tindall, A.B., ASSISTANT PROFESSOR

Marion Ross, M.A., ASSISTANT PROFESSOR

A. L. Lenard, B.A., B.P.H.E., INSTRUCTOR

Dorothy Leggett, M.Sc., INSTRUCTOR

R. A. Gow, INSTRUCTOR IN SWIMMING

Each first year student is given a careful examination by the Medical Officer at the beginning of his college Course, the appointments being made on the day of registration. Corrective and remedial work is then given in the gymnasium when it is needed by the students.

With the exception of those excused by the Medical Officer because of ill-health, all first year students are required to take two hours of gymnasium work per week during the whole of the school year. The work varies throughout the year and as much time as possible is spent outdoors in the early fall and spring. This consists of touch football, cross-country running, track and field, and softball. Every student is given a swimming test and the non-swimmers are automatically placed in an instruction group.

Indoor work follows with cooler weather and consists of swimming, calisthenics, marching, setting-up exercises, and apparatus work on the parallel bars, the horse, the mats, and horizontal bar. The winter term brings basketball, indoor softball, group games, and indoor track and field. Each student is encouraged to learn something about all of these activities and a wide variance of exercise is achieved.

Equivalent credit is given for attendance at regular organized swimming and life-saving classes, and for playing on university teams in track, football, hockey, water polo, gymnastics, tennis, and boxing and wrestling. *Such credit terminates with the regular scheduled programme of activities of each respective club*, when students will rejoin the weekly gymnasium classes or engage in any other of the sports listed above.

At the time of registration each new student must enroll in a class of physical education. For students in Arts these classes are held in the main gymnasium building as follows:



- Men (a) *Monday and Wednesday 3.30 - 4.30 p.m.*  
 (b) *Tuesday and Thursday 2.30 - 3.30 p.m.*  
 (c) *Wednesday and Friday 2.30 - 3.30 p.m.*  
 (d) *Monday and Wednesday 10.00 - 11.00 a.m.*
- Women (a) *Monday and Wednesday 11.00 - 12.00 a.m.*  
 (b) *Tuesday and Thursday 10.00 - 11.00 a.m.*  
 (c) *Wednesday and Friday 2.30 - 3.30 p.m.*  
 (d) *Tuesday and Saturday 11.00 - 12.00 a.m.*

Freshmen in Arts whose academic time-table conflicts with the above hours will be placed in other classes on application to the Director of Physical Education.

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## PHYSICS

- J. A. Gray, O.B.E., D.Sc., F.R.S.C., F.R.S., CHOWN SCIENCE RESEARCH PROFESSOR, until September, 1952
- B. W. Sargent, M.B.E., M.A., Ph.D., F.R.S.C., PROFESSOR AND HEAD OF THE DEPARTMENT
- E. E. Watson, M.Sc., Ph.D., PROFESSOR AND CHAIRMAN OF UNDERGRADUATE STUDIES
- H. M. Cave, M.A., Ph.D., PROFESSOR
- H. W. Harkness, B.Sc., B.A., M.Sc., Ph.D., PROFESSOR
- D. T. Roberts, B.Sc., Ph.D., ASSISTANT PROFESSOR
- W. M. Martin, B.Sc., Ph.D., ASSISTANT PROFESSOR
- L. E. H. Trainor, M.A., Ph.D., ASSISTANT PROFESSOR
- H. M. Love, B.Sc., Ph.D., ASSISTANT PROFESSOR
- R. S. Storey, ROBERT WADDELL TUTOR IN PHYSICS

### REGULATIONS AND ANNOUNCEMENTS

1. Physics 1 or Grade XIII Physics is prerequisite to Physics 2, and Physics 2 is prerequisite to all other courses in Physics. Exceptional students may take Physics 2 and 11 concurrently with the consent of the chairman of the department.

2. Candidates offering Physics as one of the subjects of concentration on the Pass Course take Physics 1 (Mechanics, properties of matter, heat, wave-motion, sound, light, electricity, and magnetism), 2 (Electricity and magnetism and light), 11 (Mechanics), if they have not included Physics in their Grade XIII programme; Physics 2, 11, 13b (Atomic physics), 14a (Heat and thermodynamics), if they have offered Physics of Grade XIII as one of the subjects for admission.

### 3. The Honours Course in Physics.

Candidates planning to take the Honours Course in Physics are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), Physics, a language, a fifth subject which should be Chemistry or Biology. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

#### (a) The Major.

The major is made up as follows:

- Physics 2 (Electricity and magnetism and light)
- Physics 11 (Mechanics)
- Physics 10a (Dynamics)
- Physics 12b (Introduction to the mathematical theory of electricity and magnetism)
- Physics 13b (Atomic physics)
- Physics 14a (Heat and thermodynamics)
- Physics 16a (Mechanics of rigid and elastic bodies)
- Physics 17b (Physical optics)
- Physics 20b (Electromagnetic theory)
- Physics 21a (Kinetic theory of gases)
- Physics Reading Course 1 (Heat)
- Physics Reading Course 2 (Sound)
- Physics Reading Course 3 (Evolution of physics)

When the minor is in Mathematics, two courses in Physics or Mathematics or another science must be taken in addition to the work prescribed above, the choice to be made after consultation with the chairman of the Department of Physics. When the minor is in Chemistry, the two additional courses are Mathematics 2 (Differential and integral calculus) and 13 (Calculus and differential equations); when in Biology, Chemistry 2 (General chemistry) and Chemistry 12 (Organic chemistry).

#### (b) The Minor.

The minor may be:

- Mathematics 2, 10a, 11b, 13, 19, or
- Chemistry 2, 11, 12, 13, or
- Biology 10, 16, 21, 26.

A candidate who wishes to take some other subject as minor may make application to the chairman of the Department of Physics.

- (c) Compulsory general courses to complete the work for degree:

English 2, Philosophy 1, a language. If the candidate has Grade XIII standing in a language he may take a free option as the third general course.

- (d) Two general examinations in Physics.

4. For information about the General Honours Course in Science for Teachers and the course of study leading to the Interim High School Assistants' Certificates, Type A, in Mathematics and Physics and in Science at the Ontario College of Education, see page 113.

5. When Physics is the minor associated with Mathematics as major, the minor consists of Physics 2 (Electricity and magnetism and light), 11 (Mechanics), 10a (Dynamics) and 12b (Introduction to the mathematical theory of electricity and magnetism), 13b (Atomic physics) and 14a (Heat and thermodynamics).

When Physics is the minor associated with Chemistry as major, the minor consists of Physics 2 (Electricity and magnetism and light), 11 (Mechanics), 13b (Atomic physics) and 14a (Heat and thermodynamics), and Mathematics 13 (Calculus and differential equations).

6. When Physics is one of the three special subjects on the General Honours Course the prescription of work is as follows: Physics 2 (Electricity and magnetism and light), 11 (Mechanics), 13b (Atomic physics), 14a (Heat and thermodynamics), Reading Course 1 (Heat), and Mathematics 2 (Differential and integral calculus). If possible students should select Mathematics 13 (Calculus and differential equations) as a free option.

7. For information in regard to scholarships in Physics, see pages 76 and 77.

#### COURSES OF INSTRUCTION

PHYSICS 1. MECHANICS, PROPERTIES OF MATTER, HEAT, WAVE-MOTION, SOUND, LIGHT, ELECTRICITY, AND MAGNETISM.

Many of the fundamental principles of Physics are discussed and illustrated by demonstrations and by experiments in the laboratory.

This course is sufficiently broad and complete to provide a satisfactory unit of knowledge for students who wish to take only a single course in Physics. The course is also sufficiently detailed and quantitative to provide an adequate background for students who intend to take further courses in Physics.

Text-book: O. M. Stewart, *Physics*, 5th ed. (Ginn).

LECTURES—Tuesday, Thursday, Saturday at 11.

LABORATORY—Tuesday, 1.30 - 3.30, Wednesday, 1.30 - 3.30.

Professors Cave and Sargent.

## PHYSICS 2. ELECTRICITY AND MAGNETISM AND LIGHT.

Electricity and magnetism (First Term). An elementary quantitative treatment of electricity and magnetism.

Light (Second Term). Reflection, refraction, dispersion, interference, diffraction and polarization of light are discussed from the point of view of physical optics. Some geometrical optics is included.

Prerequisite: Physics 1 or Grade XIII Physics. Although not prerequisite, Mathematics 2 will be found very useful in this course, even if taken concurrently.

Text-book: J. K. Robertson, *Introduction to Physical Optics* (Van Nostrand).

LECTURES—Tuesday, Thursday, Saturday at 9.

LABORATORY—Thursday 1.30 - 3.30, Friday 1.30 - 3.30.

Professors Watson and Sargent.

## PHYSICS 11. MECHANICS.

Rotation, simple harmonic motion, plane rigid dynamics, and elementary elasticity and fluid flow.

Prerequisites: Physics 1, Physics 2, and Mathematics 2. Students on an Honours Course with Grade A standing in Physics 1 and Grade B standing in Mathematics 2 may take Physics 2 and Physics 11 in the same year.

Text-books: N. H. Frank, *Introduction to Mechanics and Heat* (McGraw-Hill); G. R. Noakes, *Text-book of General Physics* (Macmillan).

LECTURES—Monday at 10, Friday at 2.30.

LABORATORY AND PROBLEM PERIOD—Wednesday, 1.30 - 4.30  
or 2.30 - 5.30.

Professor Cave.



## PHYSICS 10a. DYNAMICS.

Discussion of selected topics such as motion with dissipative forces, including free and forced oscillations; coupled oscillators; motion with central forces, etc.

Prerequisites: Physics 2 (62%) and Physics 11 (55%).

Text-book: H. Lamb, *Dynamics* (Cambridge University Press).

LECTURES—Tuesday, Thursday, Saturday at 10.

Professor Cave.

LABORATORY—Tuesday, 1.30 - 3.30.

Professor Sargent.

## PHYSICS 12b. INTRODUCTION TO THE MATHEMATICAL THEORY OF ELECTRICITY AND MAGNETISM.

The electric and magnetic fields; simple applications of the fundamental laws of electromagnetic theory; magnetic media; alternating currents, vector methods, complex and polar operators.

Prerequisites: Physics 2 (62%) and Physics 11 (55%).

Text-book: N. H. Frank, *Introduction to Electricity and Optics*, 2nd ed.. (McGraw-Hill).

LECTURES—Tuesday, Thursday, Saturday at 10.

LABORATORY—Tuesday, 1.30 - 3.30.

Professor Watson.

## PHYSICS 13b. ATOMIC PHYSICS.

Modern developments in such branches of Physics as radiation, X-rays, conduction of electricity through gases, radioactivity, etc.

Prerequisites: Physics 2 (62%) and Mathematics 2.

Text-book: J. A. Crowther, *Ions, Electrons and Ionizing Radiations* (Arnold).

LECTURES—Monday, Wednesday, Friday at 11.

Professor Gray.

LABORATORY—Thursday 1.30 - 3.30 or 3.30 - 5.30.

Professor Cave.

## PHYSICS 14a. HEAT AND THERMODYNAMICS.

This course is an introduction to thermodynamics, starting with a discussion of the basis of thermometry. The equations of thermodynamics are developed and applied to examples in the fields of physics, chemistry and engineering.

Prerequisites: Physics 2 (62%) and Mathematics 2.

Text-book: M. W. Zemansky, *Heat and Thermodynamics*, 3rd ed. (McGraw-Hill).

LECTURES—Monday, Wednesday, Friday at 11.

Professor Roberts.

LABORATORY—Thursday 1.30 - 3.30 or 3.30 - 5.30.

Professor Harkness.

#### PHYSICS 16a. MECHANICS OF RIGID AND ELASTIC BODIES.

Analytical dynamics, motion of rigid bodies, gyroscopes. Mechanics of deformable bodies, using tensor calculus, and the principle notions of rheology (plasticity, elasticity). Elastic bodies are studied in detail, with applications of the theory to problems such as the bending of plates and seismic waves.

Prerequisite: Physics 10a (55%).

LECTURES—Monday, Wednesday, Friday at 11.

#### PHYSICS 17b. PHYSICAL OPTICS.

The theory and phenomena of physical optics, including wave-motion, diffraction, interference spectroscopes, polarization, double refraction, and spectral series.

Prerequisites: 55% on each of Physics 10a, 12b, and 13b.

LECTURES—Tuesday, Thursday at 11, Monday at 4.30.

LABORATORY—Tuesday 1.30 - 3.30.\*

Professor Harkness.

#### PHYSICS 20b. ELECTROMAGNETIC THEORY.

The fundamental field equations and properties are discussed, then Maxwell's equations are derived and applied to the reflection, refraction and dispersion of waves. Vector analysis and rationalized m.k.s. units are used.

Prerequisites: 55% on each of Physics 10a, 12b, and 13b.

Text-book: J. C. Slater and N. H. Frank, *Electromagnetism* (McGraw-Hill!).

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\* A student registered for both Physics 17b and 22 will do this laboratory work as a part of Physics 22 on Thursday afternoons.

LECTURES—Monday, Wednesday, Friday at 11.

Professor Martin.

PHYSICS 21a. KINETIC THEORY OF GASES.

Maxwellian distribution of velocities, free path phenomena, viscosity, thermal conductivity, diffusion, Van der Waals' equation, and the quantum theory as applied to specific heats and to radiation.

Prerequisites: 55% on each of Physics 10a, 12b, 13b, and 14a.

Text-book: E. Bloch, *Kinetic Theory of Gases* (Methuen).

LECTURES—Tuesday and Friday at 10, Thursday at 11.

Professor Gray.

PHYSICS 22. ADVANCED LABORATORY COURSE.

This is the equivalent of a whole lecture course and may be one of the two supporting courses, when Physics is chosen as major. (See 3(a), page 212.)

LABORATORY—Thursday, 1.30-4.30, and Friday, 1.30-4.30.

Professors Gray, Harkness and Martin.

READING COURSES IN PHYSICS.

R 1. Heat. A. G. Worthing and D. Halliday, *Heat* (Wiley).

R 2. Sound. M. Y. Colby, *Sound Waves and Acoustics* (Holt).

R 3. Evolution of Physics. C. T. Chase, *The Evolution of Modern Physics* (Van Nostrand); A. Einstein and L. Infeld, *The Evolution of Physics* (Simon and Schuster); H. Dingle, *A Century of Science* (Hutchinson), Chapters I-X inclusive.

The principal Physics journals and books relating to the lectures and the laboratory work are kept in the library of the Physics Department and in the University library, where they may be freely consulted by the students. Certain of these may be borrowed for limited periods by making application to the librarian in charge.

GRADUATE COURSES

For information about graduate courses in Physics, see the Calendar of Graduate Studies.

## POLITICAL AND ECONOMIC SCIENCE

- F. A. Knox, B.A., F.R.S.C., PROFESSOR OF ECONOMICS AND HEAD OF THE DEPARTMENT OF POLITICAL AND ECONOMIC SCIENCE
- R. G. H. Smails, B.Sc.(Econ.), F.C.A., PROFESSOR OF COMMERCE AND DIRECTOR OF THE SCHOOL OF COMMERCE AND ADMINISTRATION
- C. A. Curtis, B.A., Ph.D., F.R.S.C., THE SIR JOHN A. MACDONALD PROFESSOR OF POLITICAL AND ECONOMIC SCIENCE
- J. A. Corry, LL.B., B.C.L., LL.D., F.R.S.C., THE HARDY PROFESSOR OF POLITICAL SCIENCE AND VICE-PRINCIPAL
- J. C. Cameron, M.Com., PROFESSOR AND HEAD OF THE DEPARTMENT OF INDUSTRIAL RELATIONS
- J. L. McDougall, M.A., PROFESSOR OF COMMERCE
- L. G. Macpherson, B.A., C.A., ASSOCIATE PROFESSOR OF COMMERCE
- K. G. Crawford, M.A., ASSOCIATE PROFESSOR OF POLITICAL SCIENCE AND DIRECTOR OF THE INSTITUTE OF LOCAL GOVERNMENT
- C. H. Curtis, M.A., ASSOCIATE PROFESSOR OF INDUSTRIAL RELATIONS
- M. C. Urquhart, B.A., ASSOCIATE PROFESSOR OF ECONOMICS
- J. E. Hodgetts, M.A., Ph.D., ASSOCIATE PROFESSOR OF POLITICAL SCIENCE
- J. E. Smyth, M.Com., C.A., ASSOCIATE PROFESSOR OF COMMERCE
- R. J. Hand, B.Com., M.B.A., ASSISTANT PROFESSOR OF COMMERCE
- D. W. Slater, B.Com., B.A., ASSISTANT PROFESSOR OF ECONOMICS
- J. Meisel, M.A., LECTURER IN POLITICAL SCIENCE

### REGULATIONS AND ANNOUNCEMENTS

1. Students taking only one course in this department may choose Economics 4 or Politics 2.

2. The Department of Political and Economic Science may be regarded as a double department for purposes of the Pass Course and students may select either one or both of Economics and Politics as special subjects. Groups may be made up as follows:

- (i) Economics 4 (Introduction to economics), 10 (Principles of economics), 12 (Money, banking, and international trade).
- (ii) Politics 2 (Introduction to government and politics), 30 (Elements of political science), and one of Politics 31 (Canadian government and constitutional law), 39 (Municipal government), Sociology 1 (Introduction to sociology).



- (iii) Economics 4 (Introduction to economics), Politics 2 (Introduction to government and politics), and one of Economics 10 (Principles of economics), 12 (Money, banking, and international trade), 13 (Introduction to accounting and finance), Politics 30 (Elements of political science), 31 (Canadian government and constitutional law), 36 (Politics of democracy), 39 (Municipal government), Sociology 1 (Introduction to sociology).

For entrance to courses number 10 or higher, in either Economics or Politics, the student must qualify by obtaining Grade B in the prerequisite course.

3. Students applying for admission to the Honours Course must have at least Grade B standing in Economics 4 (for Economics) or Politics 2 (for Politics).

4. For information in regard to scholarships in Political and Economic Science, see pages 73-76.

5. For purposes of the Honours Course, the Department of Political and Economic Science may be regarded as a double department; a student may take a major in Economics and a minor in Politics, or a major in Politics and a minor in Economics.

Candidates planning to take the Honours Course in Economics or Politics are advised to offer Grade XIII subjects as follows: English, History, Latin or Mathematics (3 papers), a science, a language. Candidates who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

#### (α) The Major.

A major in Economics requires completion of the following classes:

First year —Economics 4 (Introduction to economics)

Second year—Economics 10 (Principles of Economics)

Economics 12 (Money, banking, and international trade)

Economics 13 (Introduction to accounting and finance)

Third year —Economics 11 (Introduction to statistics)

Economics 15 (Modern economic theory)

Economics 20 (Monetary theory and policy)

Fourth year — Economics 21 (Applied economics)  
 Economics 24 (International economics)  
 Economics 25 (Economic history of Canada and the United States)

Economics Reading Course 1 (Economic history of Canada and the United States)

Economics Reading Course 2 (Contemporary Economic Interpretations)

Economics Reading Course 3 (Thesis)

A major in Politics (with History, Philosophy or Mathematics as a minor) requires completion of the following classes:

Politics 2 (Introduction to government and politics)  
 Economics 4 (Introduction to economics)  
 Economics 10 (Principles of economics)  
 Politics 30 (Elements of political science)  
 Politics 31 (Canadian government and constitutional law)  
 Politics 32 (Modern political thought)  
 Politics 36 (Politics of democracy)  
 Politics 37 (Public administration)  
 Politics Reading Course 1 (Government of Great Britain)  
 Politics Reading Course 2 (The British Commonwealth)  
 Politics Reading Course 3 (Thesis)  
 One of Politics 35 (International politics)  
 Politics 39 (Municipal government)

A major in Politics (with Economics as a minor) carries the same requirements except that an additional class in Politics and an additional class in History or Philosophy are to be substituted for the two classes in Economics.

(b) The Minor.

The minor may be:

Philosophy 1, 10, 27, and two advanced courses (see page 208, section 6), or

History 3 or 5 or 6, 12, 13 or 19, and one other course numbered over 10, or

Sociology 1.

Mathematics 2, 10a, 11b, 13, and one of 19, 20, or

Economics 4, 10, 12, and two further courses (Mathematics 3a may be offered as a half-course in Economics), or

Politics 2, 30, 31, and any two of 32, 35, 36, 37, 39.

(c) Compulsory general courses to complete the work for degree:

With Economics as major and Politics as minor or Politics as major and Economics as minor: English 2.

With Economics as major and Philosophy, Mathematics or History as minor: English 2 and Politics 2.

With Politics as major and Philosophy, Mathematics or History as minor: English 2, a language or a science. If the candidate has Grade XIII standing in both a language and a science he may use the second general course as a free option.

(d) Two general examinations in the major subject.

6. It is desirable, though not required, that a student taking a major in Economics should include Mathematics 2 (Differential and integral calculus) in his programme.

7. The Honours Course in Public Administration is made up as follows:

- (a) Politics 2 (Introduction to government and politics)
- Politics 30 (Elements of political science)
- Politics 31 (Canadian government and constitutional law)
- Politics 37 (Public administration)
- Politics 39 (Municipal government)
- Politics Reading Course 1 (The government of Great Britain)
- Politics Reading Course 2 (The British Commonwealth)
- Politics Reading Course 3 (Thesis)
- Economics 4 (Introduction to economics)
- Economics 10 (Principles of economics)
- Economics 12 (Money, banking, and international trade)
- Two other courses in Economics (Mathematics 3a may be offered as a half-course in Economics)
- One further course in Politics or Economics numbered over 10
- Three of Philosophy 1 (Introduction to philosophy)
- Psychology 2 (An elementary survey of mental life)
- History 3 (The North American Area)
- Sociology 1 (Introduction to sociology)

(b) Compulsory general course: English 2.

(c) Two general examinations in Politics.

8. Students taking Economics as one of the main subjects of the General Honours Course must take Economics 4 (Introduction to economics), 10 (Principles of economics), 12 (Money, banking, and

international trade), two other courses in Economics (Mathematics 3a may be offered as a half-course in Economics), Economics 25 (Economic history of Canada and the United States), and Economics Reading Course 1 (Economic history of Canada and the United States).

Students taking Politics as one of the main subjects of the General Honours Course must take Politics 2 (Introduction to government and politics), 30 (Elements of political science), 31 (Canadian government and constitutional law), 32 (Modern political thought), one of Politics 35 (International politics), Politics 36 (Politics of democracy), 37 (Public administration) and 39 (Municipal government), and Politics Reading Course 1 (The government of Great Britain).

9. A minor in Economics normally consists of Economics 4 (Introduction to economics), 10 (Principles of economics), 12 (Money, banking, and international trade), and two other courses in Economics (Mathematics 3a may be offered as a half-course in Economics); a minor in Politics consists of Politics 2 (Introduction to government and politics), 30 (Elements of political science), 31 (Canadian government and constitutional law), and any two of Politics 32 (Modern political thought), 36 (Politics of democracy), 37 (Public administration) and 39 (Municipal government); but students preparing for admission to the course of study leading to the Interim High School Assistant's Certificate, Type A, in History at the Ontario College of Education make up the minor as follows: Economics 4, Politics 2, Economics 10, and two further courses in Economics or Politics.

### INSTITUTE OF LOCAL GOVERNMENT

The Institute of Local Government is a branch of the Department of Political and Economic Science. Its purpose is to give sustained study and analysis to the problems of local government including the relations between the municipalities and the provincial and Dominion governments. The results of research undertaken by it are made available in bulletins as occasion warrants.

The Institute also publishes from time to time bulletins containing data of interest to municipal governments and generally acts as a clearing house for information about the financial and administrative practices of municipal governments. Instruction in local government is offered and students wishing to prepare themselves for posts with municipalities will find association with the Institute a useful preparation.



## COURSES OF INSTRUCTION

## ECONOMICS

## ECONOMICS 4. INTRODUCTION TO ECONOMICS.

A study of the economic factors affecting the distribution of population and standards of living in such mainly agricultural economies as those of the Orient, of Europe before 1800 and of colonial North America; of the "industrial revolution" in Europe and the process of industrialization in the United States, Russia, Japan and "under-developed" countries of today; and of the effects of industry on agriculture and on standards of living.

Text-books: Jones and Darkenwald, *Economic Geography* (Macmillan, 1941); Heaton, *Economic History of Europe* (Harper and Brothers, 1948).

Tuesday, Thursday, Saturday at 9.

Professor Knox.

## ECONOMICS 10. PRINCIPLES OF ECONOMICS.

A general course in economic analysis in which an attempt is made to develop a working knowledge of economic principles and their application. The course should ordinarily be taken at the same time as Economics 12.

Prerequisite: Grade B in Economics 4.

Text-books to be assigned.

Monday, Wednesday, Friday at 2.30.

Professors C. A. Curtis and Urquhart.

## ECONOMICS 11. INTRODUCTION TO STATISTICS.

A general course in the descriptive and analytical uses of statistics in the fields of economics and commerce.

Prerequisite: Mathematics 3a.

Text-book: Croxton and Cowden, *Applied General Statistics* (Prentice-Hall, 1939).

Supplementary readings will also be assigned.

Monday, Wednesday, Friday at 10.

Professor McDougall.

## ECONOMICS 12. MONEY, BANKING, AND INTERNATIONAL TRADE.

Prerequisite: Grade B in Economics 4.

Assigned readings.

*Tuesday, Thursday, Saturday at 11.*

Professor Slater.

## ECONOMICS 13. INTRODUCTION TO ACCOUNTING AND FINANCE.

An introductory study of accounting method with a related examination of some of the chief problems of corporation finance.

For Honours students whose major subject is Economics. This course has a weight of two and one-half hours per week.

Readings to be assigned.

*Monday, Wednesday, Friday at 11.*

Professor Smails.

## ECONOMICS 15. MODERN ECONOMIC THEORY.

A brief study of the development of modern schools of economic thought followed by discussion of the theory of equilibrium.

Prerequisite: Economics 10.

Text-books: Gray, *The Development of Economic Doctrine* (Longmans); Cassel, *Theory of Social Economy* (Harcourt, Brace); Marshall, *Principles of Economics* (Macmillan); Stigler, *The Theory of Price* (Macmillan).

References: Joan Robinson, *Theory of Imperfect Competition* (Macmillan); Chamberlin, *Theory of Monopolistic Competition* (Harvard University Press).

*Monday, Wednesday, Friday at 1.30.*

Professor Urquhart.

## ECONOMICS 20. MONETARY AND BUSINESS CYCLE THEORY AND POLICY.

A seminar course in monetary and business cycle theory and policy.

Prerequisite: Economics 12.

References: Haberler, *Prosperity and Depression* (League of Nations, 1941); Keynes, *General Theory of Employment, Interest, and Money* (Macmillan, 1936); League of Nations, *Economic Stability in the Postwar World* (1945); Hansen, *Business Cycles and National Income* (Norton, 1951).

*Tuesday and Thursday at 2.30.*

Professor Knox.

ECONOMICS 21. APPLIED ECONOMICS.

A study of the application of economic theory to the problems of the distribution of national wealth and income as affected by monopoly, public finance, and other public policies.

Prerequisite: Economics 15.

Text-book: Pigou, *Economics of Welfare* (Macmillan).

*Monday, Wednesday, Friday at 10, Commerce Building.*

Professor C. A. Curtis.

ECONOMICS 23. INDUSTRIAL RELATIONS.

This course will deal with the main economic and social forces which affect employer-employee relationships.

Prerequisite: Economics 10.

Text-book: Lloyd G. Reynolds, *Labor Economics and Labor Relations* (Prentice-Hall).

Assigned readings.

*Monday, Wednesday, Friday at 3.30.*

Professor C. H. Curtis.

ECONOMICS 24. INTERNATIONAL ECONOMICS.

A seminar course.

Prerequisite: Economics 20.

Assigned readings.

*Tuesday and Thursday at 2.30.*

Professor Slater.

ECONOMICS 25. ECONOMIC HISTORY.

A study of recent economic history with special reference to North America. A course one hour per week open only to honours students taking a major in Economics.

Assigned readings.

*Thursday at 1.30.*

Principal Mackintosh.

## ECONOMICS 26a. SOCIAL CONTROL OF ECONOMIC ACTIVITY.

A study of the process and structure by which economic activity is controlled on behalf of modern society.

Readings to be assigned.

Tuesday, Thursday, Saturday at 11.

Professor Hand.

## ECONOMICS 28b. ECONOMICS OF TRANSPORTATION.

The chief interest in this course will be in the economics of railway transportation in Canada.

Text-books: R. A. C. Henry et al, *Railway Freight Rates in Canada* (Ottawa, King's Printer, 1939); W. T. Jackman, *Economic Principles of Transportation* (Toronto, University of Toronto Press, 1935); D. P. Locklin, *Economics of Transportation* (Chicago, Business Publications Inc., 1935).

Assigned readings.

Monday, Wednesday, Friday at 9.

Professor McDougall.

## READING COURSES IN ECONOMICS:

R 1. ECONOMIC HISTORY OF CANADA AND THE UNITED STATES.

R 2. CONTEMPORARY ECONOMIC INTERPRETATIONS.

R 3. THESIS.

Students registered in any of these reading courses should obtain the syllabus of readings and instructions from the department.

Thesis topics are to be selected in consultation with members of the department.

For graduate courses see Caalendar of Graduate Courses.

## POLITICS

## POLITICS 2. INTRODUCTION TO GOVERNMENT AND POLITICS.

A comparative survey of the structure of present day democratic governments and the effect on them of the expansion of governmental functions in the twentieth century.

Text-book: Corry, *Democratic Government and Politics*, Revised edition, 1951 (University of Toronto Press).

Monday, Wednesday, Friday at 10.

Professor Corry.



## POLITICS 30. ELEMENTS OF POLITICAL SCIENCE.

An analysis of the principal concepts of political science.

Prerequisite: Politics 2.

Text-book: MacIver, *The Web of Government* (Macmillan).

Assigned readings.

Tuesday, Thursday, Saturday at 10.

Professor Hodgetts.

## POLITICS 31. CANADIAN GOVERNMENT AND CONSTITUTIONAL LAW.

A critical study of the governmental institutions of Canada and in particular of the British North America Act and the federal system.

Prerequisite: Politics 30.

Text-books: Dawson, *The Government of Canada* (University of Toronto Press); Selected Cases from Cameron, *The Canadian Constitution and the Judicial Committee*; selected readings from the Report of the Commission on Dominion-Provincial Relations and from Appendices thereto.

Monday, Wednesday, Friday at 9.

Professor Corry.

## POLITICS 32. MODERN POLITICAL THOUGHT.

A survey of political thought since Machiavelli.

Prerequisite: Politics 30.

Text-book: Sabine, *A History of Political Theory* (Henry Holt & Co.).

Assigned readings.

Tuesday, Thursday, Saturday at 9.

Professor Corry.

## POLITICS 35. INTERNATIONAL POLITICS.

An analytical study of the components of national power, methods in the pursuit of national interests, and of international order.

Prerequisite: Politics 30.

Required readings: Strausz-Hupé and Possony, *International Relations* (McGraw-Hill) and Morgenthau, *Politics among Nations* (Knopf). Other materials to be assigned.

Hours to be arranged.

Mr. Meisel.

## POLITICS 36. POLITICS OF DEMOCRACY.

A survey of democratic processes with reference to the role of political parties and of group activity generally.

Prerequisite: Politics 30.

Text-book: Herring, *The Politics of Democracy* (Rinehart).

Assigned readings.

Hours to be arranged.

Professor Hodgetts.

## POLITICS 37. PUBLIC ADMINISTRATION.

A comparative analysis of the structure, management and general control of the public services in Great Britain, United States and Canada.

Prerequisite: Politics 30.

Text-book: F. M. Marx, *Elements of Public Administration* (Prentice-Hall).

Assigned readings.

Monday, Wednesday, Friday at 11.

Professor Hodgetts.

## POLITICS 39. MUNICIPAL GOVERNMENT.

A survey of functions and administration of municipal government and its place in the structure of Canadian government.

Prerequisite: Politics 30, except where special permission is secured from the instructor.

K. G. Crawford, *Local Government in Canada* (mimeographed)

Assigned readings.

Monday, Wednesday, Friday at 10.

Professor Crawford.

## READING COURSES IN POLITICS:

## R 1. THE GOVERNMENT OF GREAT BRITAIN.

Bagehot, *The English Constitution* (Oxford); F. A. Ogg, *English Government and Politics* (Macmillan); H. J. Laski, *Parliamentary Government in England* (Allen); Jennings, *Cabinet Government* (Cambridge); Jennings, *Parliament* (Cambridge); K. B. Smellie, *One Hundred Years of British Government* (Duckworth); L. S. Amery, *Thoughts on the*

*Constitution* (Oxford); Wallace, *Readings in British Government* (University of Toronto Press).

R 2. THE BRITISH COMMONWEALTH.

Dawson, *Development of Dominion Status* (Oxford); Wheare, *The Statute of Westminster and Dominion Status* (Oxford); Mansergh, *The Commonwealth and the Nations* (Oxford); Jennings, *The British Commonwealth of Nations* (Hutchinson); Hodson, *Twentieth Century Empire* (Faber); Coatman, *The British Family of Nations* (Harrap).

R 3. THESIS.

Subject to be selected after consultation with members of the department.

For graduate courses see Calendar of Graduate Studies.

## SOCIOLOGY

### SOCIOLOGY 1. INTRODUCTION TO SOCIOLOGY.

An analysis of the principal concepts of sociology.

Prerequisite: Economics 4, Politics 2, or Psychology 2.

Text-book: MacIver and Page, *Society* (Rinehart).

Assigned readings.

Monday, Wednesday, Friday at 11.

Mr. Meisel.

## COMMERCE AND ADMINISTRATION

(See also Calendar of the School of Commerce and Administration)

### COMMERCE 50. INDUSTRIAL ORGANIZATION AND MANAGEMENT.

A study of the art of organizing and managing a modern industrial enterprise. In the latter part of the course the emphasis will be on problems of personnel administration in a manufacturing concern.

Text-book: Bethel, Atwater, Smith and Stackman, *Industrial Organization and Management* (McGraw-Hill).

Monday, Wednesday, Friday at 2.30.

Professor Cameron.

## COMMERCE 52. MARKETING.

A study of the marketing process, structure and problems.

Text-books: Phillips and Duncan, *Marketing Principles and Methods*; McNair and Hansen, *Problems in Marketing*.

*Tuesday, Thursday, Saturday at 10.*

Professor Hand.

## COMMERCE 53. MARKETING MANAGEMENT.

A study of the managerial marketing problems and policies of individual business firms.

Text-book: Nolen and Maynard, *Sales Management*.

Hours to be arranged.

Professor Hand.

## COMMERCE 54. BUSINESS FINANCE.

A study of the financial problems of the business enterprise.

*Monday, Wednesday, Friday at 11.*

Professor Macpherson.

## COMMERCE 55. INVESTMENT MARKETS.

An historical and statistical study of the markets for securities.

Hours to be arranged.

Professor McDougall.

## COMMERCE 59. BUSINESS INVESTIGATION AND RESEARCH.

An introduction to research methods. The student is required to select a topic and, under direction, to investigate and report upon it.

Hours to be arranged.

Professor McDougall.

## COMMERCE 60. COMMERCIAL LAW.

A study of the elements of commercial law, including the general principles of the law of contract and agency and the law relating to sale of goods, negotiable instruments, partnerships and companies.

General Reading: Anson, *Principles of the English Law of Contract* (19th edition, 1945, Oxford); Falconbridge and Smith, *Manual of Canadian Business Law* (Pitman).



Special topics: Caporn, *Cases on Contract* (Stevens and Sons); Falconbridge, *Law of Negotiable Instruments in Canada* (Ryerson); Jenks, *Book of English Law* (John Murray); *The [Dominion] Companies Act, 1934*, and other statutes.

Tuesday, Thursday, Saturday at 9.

Professor Smyth.

#### COMMERCE 63. ELEMENTS OF ACCOUNTING.

An introductory study of the principles and practice of accounting. This course is intended for students who are proceeding to the degree of Bachelor of Commerce. Arts candidates who are interested in accounting may register in Economics 13.

Text-books: Smails, *Accounting Principles and Practice* (Ryerson). Smyth, *An Introduction to Accounting Method* (Published by the author).

Monday, Wednesday, Friday at 11.

Professors Macpherson and Smyth.

#### COMMERCE 64. INTERMEDIATE ACCOUNTING.

A course in which the studies of Commerce 63 are carried to a more advanced stage and some further problems are considered.

Reading: Smails, *Accounting Principles and Practice*, 3rd Edition (Ryerson); Paton, *Advanced Accounting* (Macmillan); Finney and Miller, *Principles of Accounting*, Intermediate, 4th ed. (Prentice-Hall); Hatfield, *Accounting* (Appleton).

Tuesday, Thursday, Saturday at 10.

Professors Smails and Macpherson.

#### COMMERCE 66a. COST ACCOUNTING.

This course presents the principles and methods of cost accounting.

Tuesday, Thursday, Saturday at 9.

Professor Smails.

#### COMMERCE 67b. AUDITING AND INTERNAL CHECK.

A study of systems of internal check, the functions of internal and external auditors, and audit procedure generally.

Text-books: Smails, *Auditing*, 3rd Edition (Pitman); *Auditing Standards and Audits by Certified Public Accountants* (American Institute of Accountants).

Tuesday, Thursday, Saturday at 9.

Professor Smails.

## COMMERCE 68. CONTEMPORARY ACCOUNTING THEORY AND PRACTICE.

A study of modern accounting thought and procedures in the light of their historical development.

Students in this course are required to subscribe to *The Canadian Chartered Accountant* and *The Accounting Review*.

Hours to be arranged.

Professor Smyth.

## PSYCHOLOGY

J. M. Blackburn, B.Sc., Ph.D., PROFESSOR

C. H. McCuaig, M.D., C.M., PROFESSOR OF PSYCHIATRY

A. H. Smith, Ph.D., B.A., ASSOCIATE PROFESSOR

Isabel M. Laird, M.A., B.Ed., ASSISTANT PROFESSOR

R. M. Billings, M.D., C.M., CLINICAL ASSISTANT IN PSYCHIATRY

Elsbeth H. Baugh, A.M., INSTRUCTOR

R. J. Gibbins, M.A., INSTRUCTOR

Constance Ross, M.A., INSTRUCTOR

Doris C. Warner, M.A., RESEARCH ASSISTANT (1951 - 52)

Helen L. Brown, M.A., RESEARCH ASSISTANT (1951 - 52)

## REGULATIONS AND ANNOUNCEMENTS

1. Psychology 2 is prerequisite to all other courses in Psychology.

2. Students choosing Psychology as one of the subjects of concentration on the Pass Course take Psychology 2 (An elementary survey of mental life), 4 (Fields of psychology) and 6 (An introduction to social psychology). Those with Grade B standing in Psychology 2 may take Psychology 12 (Principles of child development) or 24 (Dynamics of personality) instead of 4 or 6. Students may not count both Psychology 8 (An introduction to child psychology) which may be taken extramurally and Psychology 12 towards their degree.

3. For information in regard to scholarships in Psychology, see page 73.

4. The Honours Course in Psychology.

Candidates planning to take the Honours Course in Psychology are advised to offer Grade XIII subjects as follows: English, Mathematics (3 papers), a language, a science (Biology is recommended),

and a fifth subject which may be a second language, a second science, or History. Students who do not offer the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

(α) The Major.

The major is made up as follows:

- Philosophy 1 (Introduction to philosophy)
- Psychology 2 (An elementary survey of mental life)
- Psychology 10a (Statistics)
- Psychology 10b (Introduction to experimental psychology)
- Psychology 11 (The principles of psychology)
- Psychology 20 (Experimental psychology—advanced)
- Psychology 26 (Theory and practice of mental tests)
- Psychology 30 (Experimental problems)
- Two of Psychology 12 (Principles of child development)
- Psychology 23 (Social psychology)
- Psychology 24 (Dynamics of personality)
- Psychology 32 (Child guidance)
- Psychology 33 (Social pathology)
- Psychology 35 (Clinical psychology)
- Psychology Reading Course 1 (Systematic psychology)
- Psychology Reading Course 2 (Dynamic psychology)
- Psychology Reading Course 3 (Social psychology)

Permission to take a major in Psychology is granted only after the whole of the student's academic record in the first year has been taken into consideration.

Where possible, students should plan their programme of lectures so that courses numbered between 10 and 19 are taken in the second year, 20 and 29 in the third, and 30 and 39 in the fourth. In particular they are advised to take the compulsory courses in the following order: second year, 10a, 10b, 11; third year, 20, 26; fourth year, 30.

The following optional courses are suggested for those who are planning to enter professions requiring a special knowledge of psychology.

Clinical psychologists	24 and 35
Child guidance work	Either 12 and 24
	Or 12 and 32
Industrial and personnel work	Either 24 and 33
	Or 12 and 32

Nursery school work, teaching	Either 12 and 24
	Or 12 and 23
	Or 12 and 32
Probation officers	Either 24 and 33
	Or 12 and 33
	Or 24 and 35
Other kinds of social work	Either 23 and 33
	Or 12 and 33

(b) The Minor.

The minor may be:

Biology 16, 26, 45, and one further course in Biology, or  
Economics 4, 10, 12, and two further courses in Economics,  
or  
Politics 2, 30, 31, and two courses in Politics selected from  
32, 36, 37, 39, or  
Mathematics 2, 10a, 11b, 13 and one of 19, 20.

(c) Compulsory general course to complete the work for the degree: English 2.

(d) Two general examinations in Psychology.

5. A minor in Psychology is ordinarily Psychology 2 (An elementary survey of mental life), 10a (Statistics), 10b (Introduction to experimental psychology), 11 (Principles of psychology) and two other courses.

6. Candidates planning to specialize in Psychology on the laboratory side are required to include Physics 1 in their Course if they have not already taken its equivalent.

### COURSES OF INSTRUCTION

#### PSYCHOLOGY 2. AN ELEMENTARY SURVEY OF MENTAL LIFE.

Text-books: Ruch, F. L., *Psychology and Life* (Gage, 3rd ed., 1948); Ruch, F. L., and Warren, N., *Working with Psychology* (Gage, 3rd ed., 1948).

Supplementary readings: Garrett, H. E., *Great Experiments in Psychology* (Appleton-Century, rev. ed., 1941); Dennis, W., *Readings in General Psychology* (Prentice-Hall, 1949); Crafts, L. W., Robinson, T. C., Schneirla, E. E., and Gilbert, R. W., *Recent Experiments in Psychology* (McGraw-Hill, rev. ed., 1950); Hartley, S. L., Birch, H. G., and Hartley, R. E., *Outside Readings in Psychology* (Crowell, 1950).

Monday, Wednesday, Friday at 11.

Professor Blackburn.



## PSYCHOLOGY 4. FIELDS OF PSYCHOLOGY.

A survey of the application of psychology to different fields, such as child psychology, industrial psychology, clinical psychology, physiological psychology, social psychology, educational psychology, personnel and vocational psychology.

Text-book: Guilford, J. P., *Fields of Psychology* (Clarke-Irwin, rev. ed., 1950).

Supplementary readings: Gray, J. L., *Psychology in Human Affairs* (McGraw-Hill, 1946); Seashore, R. H., *Fields of Psychology* (Holt, 1942); Berrien, F. K., *Practical Psychology* (Macmillan, 1949).

Monday, Wednesday, Friday at 9.

## PSYCHOLOGY 6. AN INTRODUCTION TO SOCIAL PSYCHOLOGY.

The nature of the individual and of society: the processes of socialization and social adjustment: psychological aspects of social institutions: social interaction: social pathology.

Text-books: Newcomb, T. M., *Social Psychology* (Dryden Press, 1950); Newcomb, T. M., and Hartley, E. L., *Readings in Social Psychology* (Holt, 1947). Also assigned readings.

Monday, Wednesday, Friday at 10.

Mr. Gibbins.

## PSYCHOLOGY 10a. STATISTICS.

This course is identical with Mathematics 3a. Students take the lectures and examinations in Mathematics 3a.

Monday, Wednesday, Friday at 10.

Professor Edgett.

## PSYCHOLOGY 10b. AN INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY.

An introduction to the problems and methods of experimental psychology. Students will perform experiments in human perception, learning, thinking and motivation. Recent research will be discussed.

The emphasis in this course will be on experimental design.

Assigned readings.

LECTURES—Monday and Friday at 10.

LABORATORY—Thursday, 2-5.

Professor Smith.

## PSYCHOLOGY 11. THE PRINCIPLES OF PSYCHOLOGY.

Historical development of psychological theory—present day psychological doctrines and theories.

Text-books: Boring, E. G., *History of Experimental Psychology* (Appleton-Century, rev. ed., 1950); Hilgard, E. R., *Theories of Learning* (Appleton-Century, 1948).

Supplementary readings: Murphy, G., *Historical Introduction to Modern Psychology* (Harcourt, Brace, rev. ed., 1949); Dennis, W., *Readings in the History of Psychology* (Appleton-Century, 1948); Woodworth, R. S., *Contemporary Schools of Psychology* (Ronald, rev. ed., 1948).

Students will be expected to have an acquaintance with the writings of contemporary psychologists such as Hull, Skinner, Lewin, Hebb, and to make themselves familiar with the point of view of different contemporary schools.

Tuesday, Thursday, Saturday at 11.

Professor Blackburn.

## PSYCHOLOGY 12. PRINCIPLES OF CHILD DEVELOPMENT.

A discussion of methods of child study, of the process of development and of the factors which influence development.

*Field Work:* A minimum of twenty-five hours of field work will be required as an essential part of the year's work in this course.

Text-books: Hurlock, E. B., *Child Development* (McGraw-Hill, rev. ed., 1950); Dennis, W., *Readings in Child Psychology* (Prentice-Hall, 1951).

Supplementary readings: Carmichael, L., *Manual of Child Psychology* (Wiley, 1946); Thorpe, L. P., *Child Psychology and Development* (Ronald, 1940); Gesell, A., and Ilg, F. L., *Child Development* (Harper, 1949).

Tuesday and Thursday at 10.

Professor Laird.

## PSYCHOLOGY 20. EXPERIMENTAL PSYCHOLOGY—ADVANCED.

LECTURES—Tuesday and Thursday at 10,  
or Monday and Friday at 9.

LABORATORY—to be arranged.

Professor Smith.

PSYCHOLOGY 23. SOCIAL PSYCHOLOGY—SEMINAR.

Not offered in 1952-53.

PSYCHOLOGY 24. DYNAMICS OF PERSONALITY.

A study of personality development from youth to old age, with special reference to theories of personality, methods of measuring personality, and factors influencing personality adjustment and maladjustment.

Assigned readings.

Monday, Wednesday, Friday at 11.

Professor Laird.

PSYCHOLOGY 26. THEORY AND PRACTICE OF MENTAL TESTS.

An introduction to the theory and practice of mental testing. Particular attention is given to supervised training in the administration of the Revised Stanford-Binet and Wechsler-Bellevue tests. A briefer consideration is given to the following types of test: interest inventories, aptitude tests, attainment tests, and personality tests—including some projective techniques.

Text-books: Goodenough, F. L., *Mental Testing* (Rinehart, 1949); Terman, L. M., and Merrill, M.A., *Measuring Intelligence* (Houghton Mifflin, 1937); Wechsler, D., *The Measurement of Adult Intelligence* (Williams and Wilkins, 1944).

Supplementary readings: Richards, T. W., *Modern Clinical Psychology* (McGraw-Hill, 1946); Super, D., *Appraising Vocational Fitness* (Harper, 1950).

Tuesday and Thursday at 9.

Professor Laird.

PSYCHOLOGY 30. EXPERIMENTAL PROBLEMS.

A seminar in research problems. Recent research will be discussed and each student will develop and carry out an original investigation.

Hours by arrangement.

Professor Smith.

PSYCHOLOGY 32. CHILD GUIDANCE.

One lecture a week on children's behaviour problems. Attendance at the child guidance clinic conferences at the Sunnyside Children's Centre is compulsory. Students will also be expected

to make an intensive individual study during the session of at least one child at Sunnyside.

Prerequisites: Psychology 12 and 26.

LECTURE—Wednesday at 11.

Miss Ross.

CONFERENCE—Friday, 2-4.

Dr. Billings.

### PSYCHOLOGY 33. SOCIAL PATHOLOGY.

Not offered in 1952-53.

### PSYCHOLOGY 35. CLINICAL PSYCHOLOGY.

Lectures and demonstrations having a special bearing on the psychoses and psychoneuroses. The purpose is to give the student a first hand acquaintance with clinical material and problems.

The course is given to specially qualified students and by arrangement with the instructor and the department.

Prerequisite: Grade B in Psychology 24.

Texts and hours by arrangement.

Dr. McCuaig and Mrs. Baugh.

### READING COURSES IN PSYCHOLOGY.

#### R 1. SYSTEMATIC PSYCHOLOGY.

Prerequisite: Psychology 11.

Ellis, W. D., *A Source Book of Gestalt Psychology* (Kegan Paul); Gibson, J. J., *The Perception of the Visual World* (Houghton Mifflin); Humphrey, G., *Thinking* (Wiley); Hebb, D. O., *Organization of Behaviour* (Wiley).

#### R 2. DYNAMIC PSYCHOLOGY.

Allport, G. W., *Personality* (Holt); Dollard, J., and Miller, N. E., *Personality and Psychotherapy* (McGraw-Hill); Kardiner, A., *The Individual and his Society* (Columbia Univ. Press); Kluckhohn, C., and Murray, H. A., *Personality in Nature, Society and Culture* (Knopf).

#### R 3. SOCIAL PSYCHOLOGY.

Krech, D., and Crutchfield, R. S., *Theory and Problems of Social Psychology* (McGraw-Hill); Flugel, J. C., *Man, Morals and Society* (Duckworth); Miller, N. E., and Dollard,



J., *Social Learning and Imitation* (Yale Univ. Press); Sargent, S. S., *Social Psychology* (Ronald).

Material from the preceding references should be supplemented by reference to the appropriate sections of Newcomb, T. M., and Hartley, E. L., *Readings in Social Psychology* (Holt).

### GRADUATE COURSES

For information about graduate courses in Psychology, see the Calendar of Graduate Studies.

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## RELIGION

Rev. S. MacLean Gilmour, B.D., Ph.D., D.D., PROFESSOR

Rev. H. A. Kent, E.D., M.A., D.D., LL.D., F.R.S.A., F.A.G.S.,  
SESSIONAL LECTURER

### COURSES OF INSTRUCTION

#### RELIGION 1. OLD TESTAMENT LITERATURE AND HISTORY.

The beginnings of Hebrew literature; ballads; war-songs; folk lore and saga; historical prose; the literary sources of the Hexateuch and historical books; the origin and development of prophecy; Hebrew poetry and wisdom literature; the Apocryphal and Apocalyptic writings. Hebrew political history down to the Maccabean period, and the relation of the Hebrew people to the surrounding nations of antiquity.

Text-books: Bewer, *Literature of the Old Testament* (Columbia University Press); Goodspeed, *The Story of the Bible* (University of Chicago Press). Other reading to be assigned.

Offered in 1952-53 but not in 1953-54.

Tuesday, Thursday, Friday at 1.30.

Dr. Kent.

#### RELIGION 2. NEW TESTAMENT LITERATURE AND HISTORY.

Origin of New Testament writings: Codices and Manuscripts; the Latin Bible; the English versions; the Gospels studied as the literary sources of the teaching of Jesus; the Synoptic and Johan-

nine Problems; the life and letters of St. Paul; the Christian Apocalypses; the social and religious conditions in the Roman Empire and the spread of Christianity up to the end of the first century.

Text-books: Moffatt, *New Translation of the New Testament*; Goodspeed, *Paul* (Winston, Philadelphia); Scott, *The Literature of the New Testament* (Columbia University Press). Other reading to be assigned.

(Not offered in 1952-53.)

### RELIGION 3. THE CHIEF NON-CHRISTIAN RELIGIONS OF THE WORLD.

The history, principles, practices, and sacred literature of Hinduism, Buddhism, Confucianism, Shinto, Judaism, Zoroastrianism, and Islam; the strength and weakness of the various faiths; their present vitality; areas of possible or actual conflict and co-operation.

Text-books: Noss, *Man's Religions* (Macmillan); Ballou, *World Bible* (Viking Press).

(Not offered in 1952-53.)

### RELIGION 4. CHRISTIANITY WITHIN WESTERN CIVILIZATION.

The impact of Christianity on the political, economic, social, intellectual and religious life of the Graeco-Roman world; the effect of Christianity on social relations, political theory, education, scholarship and literature during the mediaeval period; the social effects of the Protestant and Catholic Reformations; Christianity and the expansion of European peoples after the discovery of the New World; Christianity and its environment in modern times; the strength and weakness of present-day Christianity; the challenge to Christianity of new paganisms.

Text-books: Nichols, *The Growth of the Christian Church* (Westminster); Latourette, *Anno Domini* (Harper).

(Offered in 1952-53 but not in 1953-54.)

Tuesday, Thursday, Saturday at 10.

Dr. Gilmour.

ROMAN HISTORY, GREEK AND, SEE CLASSICS

## RUSSIAN LANGUAGE AND LITERATURE

Valentina N. Krotkov, M.A., INSTRUCTOR

### COURSE OF INSTRUCTION

#### RUSSIAN A. ELEMENTARY RUSSIAN.

The object of this course is to give students the common vocabulary, the fundamental grammatical structure of the Russian language and a brief introduction to Russian literature. As this is an introductory course, no previous knowledge of the language is required.

Text-book: A. Semeonoff, *A New Russian Grammar*.

Hours to be arranged.

Mrs. Krotkov.

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## SPANISH LANGUAGE AND LITERATURE

H. W. Hilborn, M.A., Ph.D., PROFESSOR

A. M. Fox, M.A., ASSISTANT PROFESSOR

J. K. McDonald, M.A., LECTURER

### REGULATIONS AND ANNOUNCEMENTS

1. Spanish A may be counted towards a Pass degree, or as an optional course on Honours Courses in subjects other than Spanish. It may not be counted towards a major or minor in Spanish. Students who enter the University without matriculation in Spanish and who wish to specialize in this subject may complete their programme of work in the usual time by taking Spanish A during their first winter session and Spanish 1 in the following summer.

2. Spanish A (Introductory Spanish) is prerequisite to Spanish 1 (Intermediate Spanish), and Spanish 1 is prerequisite to all other courses. Students making Spanish one of the three subjects of concentration on the Pass Course take Spanish A, 1, 2 (Modern authors; language) or 6 (*Don Quijote* and representative modern authors; commercial Spanish); or if they have entered with Grade XII Spanish, 1, 2, 6 or 10 (Spanish civilization; modern literature); or if they have Grade XIII Spanish, 2, 6, and 10.

### 3. The Honours Course in Spanish.

Candidates planning to take the Honours Course in Spanish are advised to offer Grade XIII subjects as follows: English, Latin, French, Spanish, a science. Candidates who are not able to take the normal Grade XIII programme but who have full standing for admission to the Faculty of Arts may arrange their degree Course so as to include the subjects that they lack.

#### (a) The Major.

The major is made up as follows:

- Spanish 2 (Modern authors; language)
- Spanish 10 (Spanish civilization; modern literature)
- Spanish 22 (Drama of the Golden Age; advanced composition)
- Spanish 24 (Cervantes; advanced composition)
- Spanish 29 (El Teatro Moderno y la Novela Realista)
- Spanish 30 (Desarrollo de la Lengua y Literatura Castellanas Desde Los Orígenes Hasta la Época Moderna; Introducción a la Literatura Hispanoamericana)
- With two courses to be selected from Latin 2 (Translation and prose composition), French 2 (Second year French), an Honours course in English, History 12 (Mediæval Europe, 400-1453) or History 24 (The Renaissance and the Reformation), Italian 1 (Intermediate Italian).
- Spanish Reading Course 1 (Civilización Española)
- Spanish Reading Course 2 (Autores Clásicos)
- Spanish Reading Course 3 (Autores Hispanoamericanos)
- Italian 1, if not selected previously, may be substituted for one of the reading courses.

#### (b) The Minor.

The minor may be:

- French 2, 10, 11, 14, or
- German 2, 10, and two honours courses in German, or
- English 2 or 5, 10, any two chosen from 15, 19, 20, 22, or
- Latin 2, 12 or 13, 20, 30.

#### (c) Compulsory general courses to complete the work for degree:

With French or German or Latin as minor: English 2, Philosophy 1 or 5, a science. If the candidate has Grade XIII standing in a science, he may take a free option as the third general course.



With English as minor: Philosophy 1, a science, a free option. If the candidate has Grade XIII standing in a science, he may take a free option as the second general course.

(d) Two general examinations in Spanish.

4. For information about the course of study leading to the High School Teaching Certificate in French and Spanish, see page 112.

5. For information about scholarships in Spanish, see page 73.

6. A minor in Spanish normally consists of Spanish 2 (Modern authors; language), 10 (Spanish civilization; modern literature), and two further honours courses.

#### COURSES OF INSTRUCTION

##### SPANISH A. INTRODUCTORY SPANISH.

For students with little or no previous knowledge of Spanish.

The course comprises a study of the essentials of Spanish grammar with exercises in translation into Spanish, pronunciation, and extensive reading of graded Spanish texts designed to lead the student from simple Spanish to prose of moderate difficulty and selected to illustrate various aspects of Spanish-American civilization. Oral work in connection with the texts.

Text-books: Babcock and Treviño, *Introduction to Spanish* (Houghton-Mifflin); Turk, *Así se aprende el español* (Heath); Barlow and Steel, *Noche oscura en Lima* (Crofts).

*Monday, Wednesday, Friday at 9.*

*Monday, Wednesday, Friday at 10.*

*Monday, Wednesday, Friday at 11.*

*Tuesday, Thursday, Saturday at 9.*

Professor Fox and Mr. McDonald.

##### SPANISH 1. INTERMEDIATE SPANISH.

Prerequisite: Spanish A or Grade XII Spanish.

A more detailed study of Spanish grammar, written exercises and composition, the reading of a number of texts and oral work thereon. The reading programme is designed to lead the student from easy texts, dealing with topics of Spanish and Spanish-American history and culture, through short stories and poems to a standard modern drama.

Text-books: Walsh, *Repaso* (Norton); Huebener and Morales, *Grandes latinoamericanos* (Holt); Cano, *La vida de un pícaro* (Macmillan); Kasten and Neale-Silva, *Lecturas modernas* (Harper); Casona, *La Sirena varada* (Appleton-Century-Crofts).

Monday, Wednesday, Friday at 9.

Monday, Wednesday, Friday at 1.30.

Professors Hilborn and Fox.

SPANISH 2. MODERN AUTHORS. LANGUAGE: Survey of Grammar, Composition, Conversation.

Prerequisite: Spanish 1 or Grade XIII Spanish.

Text-books: Bodsworth and James, *Cuentos modernos* (Black); Palacio Valdés, *A cara o cruz* (Macmillan); Martínez Sierra, *Canción de cuna* (Heath); Benavente, *Los malhechores del bien* (Macmillan); Barton and Cúneo, *Spanish Review* (Crofts) — grammar study and passages for composition; Julio Camba, *La rana viajera* (Heath). Conversational guide reading also assigned.

Extramural students are to obtain: García-Prada, *Entendámonos* (Houghton Mifflin).

Extramural students must satisfy the oral requirements. Unless these have been met by previous work done at the University, it will be necessary either to complete the course at the Summer School or to take a special oral examination.

Tuesday, Thursday, Saturday at 9, and additional practice hours.

Professor Fox and Mr. McDonald.

SPANISH 6. DON QUIJOTE. REPRESENTATIVE MODERN AUTHORS. COMMERCIAL SPANISH.

The study of commercial Spanish, with exercises in Spanish commercial correspondence, constitutes one third of the course.

Prerequisite: Spanish 1 or Grade XIII Spanish.

Text-books: Cervantes, *Don Quijote de la Mancha*, ed. J. Cano (Macmillan); Pattison, *Representative Spanish Authors*, Vol. II (Oxford University Press); Turk and Brady, *Spanish Letter Writing* (Heath); McHale, *El comercio* (Heath).

Readings in *Don Quijote* in addition to those found in Cano's selections will be assigned.

Tuesday, Thursday, Saturday at 10.

Mr. McDonald.

## SPANISH 10. SPANISH CIVILIZATION. MODERN LITERATURE.

Text-books: Babín, *Introducción a la cultura hispánica* (Heath). Alarcón, *El sombrero de tres picos* (Holt); Palacio Valdés, *Marta y María* (Ginn); Galdós, *Marianela* (Heath); García Gutiérrez, *El trovador* (Heath); Benavente, *Tres comedias* (Heath); Quinteros, *Doña Clarines, Mañana de sol* (Heath); Marquina, *En Flandes se ha puesto el sol* (Heath).

Tuesday, Thursday, Saturday at 10.

Note: Pass students may be admitted to courses numbered 10 and upward if their previous work in Spanish is of sufficiently high calibre. Before enrolling in such courses they should obtain the consent of the department.

Professor Hilborn.

## SPANISH 22. DRAMA OF THE GOLDEN AGE. ADVANCED COMPOSITION.

A study of representative comedias of the *Siglo de Oro*. Exercises in advanced prose composition.

Text-books: Alpern and Martel, *Diez comedias del Siglo de Oro* (Harper); Peers, *Extracts for Translation, Spanish edition* (Harrap).

Not offered in 1952 - 53.

## SPANISH 24. CERVANTES AND HIS TIMES. ADVANCED COMPOSITION.

Text-books: Miguel de Cervantes Saavedra, *Don Quijote de la Mancha* (in *Colección Austral*, Espasa-Calpe); Valbuena Prat, *La vida española en la edad de oro* (Las Américas); Peers, *Extracts for Translation, Spanish edition* (Harrap).

Peers, *Extracts for Translation, Spanish edition* (Harrap).

Monday, Wednesday, Friday at 10.

Professor Hilborn..

## SPANISH 29. EL TEATRO MODERNO Y LA NOVELA REALISTA.

Text-books: *Nineteenth Century Spanish Plays*, ed. L. E. Brett (Appleton-Century); Valera, *Pepita Jiménez* (Heath); Pérez Galdós, *Doña Perfecta* (Ginn).

For reference: César Barja, *Libros y autores modernos*, rev. ed. (Campbell's Book Co., Los Angeles).

Not offered in 1952-53.

SPANISH 30. DESARROLLO DE LA LENGUA Y LITERATURA CASTELLANAS  
DESDE LOS ORÍGENES HASTA LA ÉPOCA MODERNA. INTRODUCCIÓN  
A LA LITERATURA HISPANOAMERICANA.

Text-books: Romera-Navarro, *Antología de la literatura española* (Heath); Jorge Isaacs, *María* (Ginn); Ricardo Güiraldes, *Don Segundo Sombra* (Holt); Rómulo Gallegos, *Doña Bárbara* (Crofts); Ciro Alegría, *El mundo es ancho y ajeno* (Crofts); Gregorio López y Fuentes, *Tierra* (Ginn).

Hours to be arranged.

Professor Fox and Mr. McDonald.

READING COURSES IN SPANISH:

R 1. Civilización Española.

Rafael Altamira, *Manual de historia de España*, or W. C. Atkinson, *Spain, a Brief History*; N. B. Adams, *España* — sections on history and the arts; Paul Jamot, *La Peinture en Espagne*; Havelock Ellis, *The Soul of Spain*; Tamayo y Baus, *La locura de amor*; Santa Teresa, *Libro de su vida* (*Las misericordias de Dios*); George Borrow, *The Bible in Spain*; Unamuno, *Perplexities and Paradoxes*; Baroja, *Zalacaín el aventurero*; Elliot Paul, *The Life and Death of a Spanish Town*; Madariaga, *Englishmen, Frenchmen, Spaniards*. References and a reading plan will be provided by the instructor in charge.

Professor Fox.

R 2. AUTORES CLÁSICOS.

*Romancero general* (*Biblioteca de autores españoles*, Vol. 16, Nos. 918-950); Garcilaso de la Vega, *Works* (ed. Keniston); Góngora, *Poesías* (ed. Baker, pp. 1-24), *Soledad Primera* (same edition, pp. 46-80); Quevedo, *La vida del Buscón*; Lope de Vega, *Amar sin saber a quién*, *La moza de cántaro*; Tirso de Molina, *El vergonzoso en palacio*; Alarcón, *Las paredes oyen*; Calderón, *El Mágico prodigioso*, *El alcalde de Zalamea*.

Professor Hilborn.

R 3. AUTORES HISPANOAMERICANOS

Azuela, *Los de abajo*; López y Fuentes, *El indio*; Altamirano, *El zarco*; Hernández, *Martín Fierro*; Gálvez, *La pampa y su pasión*; Wast, *La casa de los cuervos*; Florencio Sánchez, *La gringa*; Varela, *Dido* (in *Tragedias*, pp. 39-133);



Barrios, *El hermano asno*; Gabriela Mistral, *Ternura*; Torres-Rioseco, *The Epic of Latin American Literature*.

Professor Hilborn.

## GRADUATE COURSES

For information about graduate courses in Spanish, see the Calendar of Graduate Studies.

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## ITALIAN LANGUAGE AND LITERATURE

### REGULATIONS AND ANNOUNCEMENTS

The courses in Italian are offered only if they are asked for by five or more students. They are recommended especially for students taking the Honours Course in Spanish or French or the course of study leading to the Interim High School Assistant's Certificate, Type A, in Spanish and French. Italian I may be substituted for one of the reading courses or one of the courses given outside the department of Spanish on the major in Spanish.

### COURSES OF INSTRUCTION

#### ITALIAN A. INTRODUCTORY ITALIAN.

The general aims of the course correspond to those of Spanish A, but the amount of work covered will be considerably greater.

Text-books: Russo, *Present Day Italian* (Heath); Goggio, *A New Italian Reader for Beginners* (Heath); Masella, *Le Avventure di Giovanni Passaguai* (Holt); Bergin, *Modern Italian Short Stories* (Heath).

Hours to be arranged.

Professor Hilborn.

#### ITALIAN I. INTERMEDIATE ITALIAN AND INTRODUCTION TO LITERATURE.

A continuation of grammar and oral work, along with a study of some important representative works in Italian literature.

Prerequisite: Italian A or Grade XIII Italian.

Text-books: Russo, *Present Day Italian* (Heath); Marraro, *Contemporary Italian Short Stories* (Holt); Pirandello, *Così è se vi pare* (Heath); Leopardi, *Selected Poems*, ed. Jeffrey (Macmillan); Fogazzaro, *Peregrinazioni* and *Un'idea di Ermes Torranza* (Heath); Deledda, *Il vecchio della montagna* (Heath); Manzoni, *I promessi sposi*, ed. Geddes and Wilkins (Heath); Dante, *La vita nuova*, ed. McKenzie (Heath).

Hours to be arranged.

Professor Hilborn.

# INDEX

Abramsky, Harry, Scholarships	
in Commerce .....	74
in Hebrew .....	71
Absence from class, Certificate for .....	44
Academic year .....	5
Administration and government .....	13
Administration, Officers of .....	16
Admission,	
by equivalent examination .....	50
by matriculation .....	47
by special regulation .....	52
of ex-service men and women .....	50
Requirements for .....	47
to advanced standing .....	51
to Combined Course in Arts and Physical and Health Education .....	116
to Honours .....	108
Advanced standing, Admission to .....	51
Aikins, Sir James, Fellowship in History .....	90
Allowance from another university .....	51
Fee for .....	56
Alma Mater Society .....	44
Alma Mater Society Lecture .....	44
Applied Science, Teacher's Certificate for graduates in .....	114
Art .....	124
Arts '01, Fellowship in English .....	70
Arts '09 Scholarship in History .....	72
Arts '15 Scholarship .....	70
Arts '50 Scholarship .....	81
Astronomy .....	200
Athletics, Facilities for .....	37
Atkinson Foundation Scholarships .....	85
Bachelor of Arts,	
Honours, Requirements for .....	108
Hoods .....	40
Pass, Requirements for .....	105
Back Classes .....	100
Bacteriology .....	125

# INDEX

	Page
Baker, Manley B., Scholarships in Geology .....	80
Baker, William Coombs, Memorial Prize .....	76
Ban Righ Hall .....	41
Berry House .....	41
Biochemistry .....	126
Biological Museum .....	35
Biology,	
Courses of instruction in .....	131
Facilities for field work in .....	37
Honours Course in .....	129
Scholarships in .....	77
B'nai B'rith, Kingston, Bursary .....	81
Board and room .....	41,42
Board of trustees .....	13,17
Bogart, Flossie May, Scholarship in Greek .....	68
Boucher House .....	42
Bruce, E. L., Memorial Scholarship .....	89
Bruce, Robert,	
Bursaries .....	82
Scholarships .....	82
Bursary,	
B'nai B'rith, Kingston .....	81
George Taylor and Lilian Coleman Taylor .....	85
Robert Bruce .....	82
University Women's Club of Kingston .....	83
Calendar .....	8
California Standard Company	
Fellowship .....	89
Scholarships .....	77
Cameron, M. C., Prize in Gaelic .....	96
Canadian Federation of University Women	
Scholarships .....	94
Canadian Officers' Training Corps .....	45
Canadian Officers' Training Corps Scholarships .....	81
Cappon, James, Memorial Scholarship in English .....	68
Certificates,	
Equivalent to Grade XIII .....	51



for absence from class .....	44
Vaccination .....	44
Chemical Institute of Canada Scholarships .....	79
Chemistry,	
Courses of instruction in .....	139
Fellowships in .....	87
Honours Course in .....	138
Scholarships in .....	78
Chest survey, X-Ray .....	44
C.I.L. Fellowship in Chemistry .....	88
Clarkson Prize in Accounting .....	74
Classes in honours .....	110
Classical Literature .....	145
Classics,	
Courses of instruction in .....	145
Interim High School Assistant's Certificate, Type A, in 111,148	
Scholarships in .....	67
Cohen, Isaac, Scholarship in Philosophy .....	73
Collins House .....	41
Commerce,	
Courses of instruction in .....	229
Fellowships in .....	88
Commercial Specialist's Certificate .....	114
Concert series .....	38
Co-operative residences .....	41
Correspondence, Courses by .....	53
Council of Legal Education of Great Britain .....	40
Council, University .....	13,19
Courses,	
General Honours .....	108
Graduate .....	121
Half .....	104
Honour .....	104,108
in Arts and Theology .....	119
leading to degrees .....	104
Numbering of .....	104
Pass .....	104,105

Physical and Health Education .....	116
Specialist Honours .....	110,112,113
Specialized Honours .....	108
Curators of the Library .....	21
Curtis Memorial Foundation .....	97
Dates, Sessional .....	5
Daughters of the Empire Postgraduate Fellowships (Overseas) ....	95
Davies, Senator, Poetry Prize .....	96
Day Scholarship in Physics and Mathematics .....	77
Degrees,	
by examination .....	39
honorary .....	39
Determination of standing .....	103
Diplomas .....	39
Doctor of Philosophy .....	123
Drama .....	155
Dunn, Sir James, Scholarship in Commerce .....	75
Dunning, Chancellor C. A., Scholarship in Political and Eco- nomic Science .....	73
Dupuis, N. F., Scholarship in Mathematics .....	76
Economics,	
Courses of instruction in .....	223
Honours Course in .....	219
Scholarships in .....	73
Emeritus professors .....	22
Employment service .....	46
English A .....	105,159
English,	
Courses of instruction in .....	159
Honours Course in .....	157
Interim High School Assistant's Certificate, Type A, in ....	112
Scholarships in .....	68
Specialist Course in .....	112,113
Entrance conditions .....	47,52,53
Equipment and special features .....	34
Exchange scholarships .....	85,86

# INDEX

Page

## Examinations,

Admission to .....	102
Application for extramural .....	58,102
Centres for .....	59
Extramural .....	58
Fees for .....	65
Final .....	101
Mid-term .....	101
Mid-year .....	101
Reading course .....	102
Re-reading of .....	103
Special .....	103
Supplemental .....	58,102

Expenses .....	42
----------------	----

Ex-servicemen, Admission of .....	50,105
-----------------------------------	--------

Extramural English 2, Scholarship in .....	69
--	----

## Extramural work,

Admission to .....	53
Courses offered by .....	60
Examinations for .....	58
Fees for .....	55,66
Library facilities for .....	57
Registration for .....	55
Regulations governing .....	53
Residence requirements .....	56
Supplemental examinations in .....	58
Text-books for .....	57

Faculty boards .....	15
----------------------	----

## Failures,

and low grades .....	101,102
Loss of year .....	101
on extramural examinations .....	58

## Fees,

Examination .....	65
Extramural and Summer School .....	55,66
Graduate .....	64
Graduation .....	65
Intramural .....	64

# INDEX

	Page
Laboratory .....	65
Late .....	65
Physical and Health Education .....	119
Pro tanto allowance .....	65
Year .....	64
Fellowships,	
in Chemistry .....	87
in Commerce .....	88
in Geology .....	89
in History .....	90
in Industrial Relations .....	91
in Radio Arts .....	84
in Philosophy .....	91
Resident .....	86
Travelling .....	86
Field work, Facilities for .....	37
Finlay, C. F. J., Memorial Prize .....	75
Forrester, Edgar, Scholarship in Oral French .....	97
Fraternities .....	44
French,	
Courses of instruction in .....	165
Honours Course in .....	163
Interim High School Assistant's Certificate, Type A, in ....	112
Oral work in .....	165
Scholarships in .....	70,97
Specialist Course in .....	112
Gaelic, M. C. Cameron Prize in .....	96
General Honours Course .....	109
General information .....	39
General regulations .....	99
Geological Sciences,	
Courses of instruction in .....	172
Facilities for field work in .....	37
Fellowships in .....	89
Honours Course in .....	170
Scholarships in .....	80
German,	
Courses of instruction in .....	181



# INDEX

Page

Honours Course in .....	179
Scholarships in .....	71
Specialist Course in French and .....	112
Gordon, Wilhelmina, Foundation in English .....	70
Government and Administration .....	13
Government, Student .....	44
Gowan Foundation No. I .....	74
Gowan Foundation No. II .....	78
Gowan Foundation No. III .....	74
Grade XIII,	
Certificates equivalent to .....	51
Examinations .....	47
Recommended programmes for .....	48
Grades .....	103
Graduate Record Examinations .....	122
Graduate work,	
Application for .....	121
Fees for .....	64
Regulations governing .....	121
Thesis for .....	121
Graduation fees .....	65
Greek,	
Course of instruction in .....	148
Honours Course in .....	147
Scholarships in .....	68
Greek and Roman History,	
Courses of instruction in .....	151
Scholarships in .....	68
Greene, Lorne, Fellowship in Radio Arts .....	84
Gymnasium .....	37
Gymnasium costume for women students .....	42
Haydon, Andrew, Scholarship in Colonial History .....	72
Hayunga Scholarship .....	81
Health Insurance .....	42
Hebrew,	
Courses of instruction in .....	185
Scholarships in .....	71

INDEX	Page
Hersey, Milton, Fellowship in Chemistry .....	87
Hicks, Clarence J., Memorial Fellowship in Industrial Relations .....	91
Hillmer, Arthur, Memorial Prize .....	75
History,	
Courses of instruction in .....	189
Fellowships in .....	90
Honours Course in .....	186
Interim High School Assistant's Certificate, Type A, in .....	113,188
Scholarships in .....	72
Specialist Course in .....	113
History of the University .....	11
Honours,	
Admission to .....	108
Classes in .....	110
Honours Courses,	
Final year examinations in .....	109
General .....	109
in languages .....	110
Length of .....	109
Pass degree on .....	110
Specialist .....	110,112,113
Specialized .....	108
Hoods .....	40
Hospital care for students .....	43
Industrial Relations,	
Courses of instruction in .....	196
Department of .....	195
Fellowships in .....	91
Prize No. I .....	76
Information for women students .....	41
Information, General .....	39
Inspectors' Certificates .....	116
Institute of Local Government .....	222
Instruction, Officers of .....	22
Interim High School Assistant's Certificate .....	111
for graduates in Applied Science .....	114,115
in Physical and Health Education .....	118
Italian, Courses of instruction in .....	247

# INDEX

Page

Khaki University and Y.M.C.A. Memorial Fund .....	82
Laboratories,	
Biological .....	35
Chemical .....	35
Geological .....	36
Physics .....	36
Psychological .....	36
Laboratory fee .....	65
Laird, Alexander, Scholarship in English .....	68
Languages, Honours Courses in .....	110,112
Latin,	
Courses of instruction in .....	154
Honours Course in .....	152
Interim High School Assistant's Certificate, Type A, in ....	112
Scholarships in .....	67
Specialist Course in .....	112
Laurier, Sir Wilfrid, Memorial Scholarship in French .....	71
Leonard, Reuben Wells,	
Resident Fellowships .....	87
Scholarships .....	80,85
Travelling Fellowships .....	87
Library,	
Curators .....	21
Douglas .....	34
Facilities for extramural students .....	57
Lieff, Solomon, Prize in Physical Chemistry .....	79
Local Government, Institute of .....	222
Lohead, W .M. O., Scholarship in Economics .....	73
London Life Insurance Company .....	42,43
Loss of year .....	101
Maritime Provinces Trade Relations Fellowship .....	88
Marty Memorial Scholarship .....	92
Master of Arts,	
Fees for .....	64
Requirements for .....	121
Mathematics,	
Courses of instruction in .....	199

Honours Course in .....	198
Interim High School Assistant's Certificate, Type A, in .....	113, 115
Scholarships in .....	76
Specialist Honours Course in .....	113
Matheson Prize .....	97
Matriculation examinations .....	47
Mature students, Admission of .....	52, 54
Medals .....	98
Medical care .....	42
Merkley, E. D., Prize in Mathematics 2 .....	76
Mewkill, Mary, Memorial Scholarship in English .....	69
Mid-term examinations .....	101
Mid-year examinations .....	101
Military services .....	45
Miller Analogies Test .....	123
Miller Memorial Museum .....	35
Milligan, George MacBeth, Fellowship in Philosophy .....	91
Moffat, William, Scholarship in Chemistry .....	78
Montgomery, O. M., Memorial Fund .....	83
Museums .....	35
Music, Courses of instruction in .....	202
Music Room .....	34, 38
MacClement, W. T., Memorial Scholarship in Biology 1 .....	77
MacClement, W. T., Prizes .....	98
McCulloch, Andrina, Scholarship for Public Speaking .....	81
McCulloch, Frederica, Scholarships in Latin .....	67
McCulloch, Roberta, Scholarships in English .....	69
McIlquham Foundation in English .....	70
MacLennan Scholarship in Greek .....	68
McIver Scholarships in English .....	69
MacLachlan, Alexander, Peace Prize .....	96
McLaughlin, R. Samuel, Resident Fellowships .....	86
McLaughlin, R. Samuel, Travelling Fellowship .....	86
McLennan, Mary Fraser, Prize in Hebrew .....	72
McNeill Prize .....	98
Near, Susan, Scholarships	
in Chemistry .....	78
in Geology .....	80



# INDEX

Page

in German .....	71
in History .....	72
in Mathematics .....	76
in Physics .....	77
in Psychology .....	73
in Spanish .....	72

## Near, W. W., Scholarships

in Biology .....	78
in Classics .....	68
in French .....	70
in German .....	71
in Political and Economic Science .....	74
in Spanish .....	72

Neish, A. C., Prizes .....	79
----------------------------	----

Neish, William, Fellowship in Chemistry .....	88
---	----

Nichols, Dr. William H., Scholarship in Chemistry .....	78
---	----

Number of courses in a year .....	100
-----------------------------------	-----

Officers of administration .....	16
----------------------------------	----

Officers of instruction .....	22
-------------------------------	----

Ottawa B'nai B'rith Scholarship in French .....	71
---	----

Ottawa Ladies' College Scholarships .....	83
---	----

## Pass B.A.,

on an Honours Course .....	110
----------------------------	-----

Requirements for .....	105
------------------------	-----

Patton, George and Mary Louise, Memorial Scholarship .....	74
--	----

Permanent First Class Teaching Certificate .....	47,54
--	-------

## Philosophy,

Courses of instruction in .....	206
---------------------------------	-----

Fellowships in .....	91
----------------------	----

Honours Course in .....	204
-------------------------	-----

Scholarships in .....	73
-----------------------	----

## Physical and Health Education,

Admission to .....	116
--------------------	-----

Combined Course in Arts and .....	116
-----------------------------------	-----

Fees .....	119
------------	-----

for first year students .....	210
-------------------------------	-----

High School Assistant's Certificate in .....	118
--	-----

# INDEX

	Page
Physical examination .....	43
Physical welfare of students .....	42
Physics,	
Courses of instruction in .....	213
Fellowships in .....	92
Honours Course in .....	212
Scholarships in .....	76
Pipe Band Scholarship .....	82
Political and Economic Science,	
Courses of instruction in .....	223
Honours Course in .....	219
Scholarships in .....	73
Preparatory courses .....	100,104
Prince of Wales Prize .....	96
Prizes .....	83,84,96
Prizes, Summer School .....	97
Pro tanto allowance, fee for .....	56,65
Psychology,	
Course of instruction in .....	234
Honours Course in .....	232
Scholarship in .....	73
Public Administration, Honours Course in .....	221
Public Speaking, Andrina McCulloch Scholarships in .....	81
Radio Arts, Lorne Greene Fellowship in .....	84
Rattray, Major James H., M.C., Scholarship .....	90
R.C.A.F. Reserve University Flight .....	45
Registration .....	46
Registration,	
Dates of .....	5
Fee for late .....	46
Religion, Courses of instruction in .....	239
Re-reading of examination papers .....	103
Residence for women students .....	41
Residence requirements for degree .....	56
Rhodes Scholarship .....	92
Russian, Courses of instruction in .....	241
Scholarships,	
Exchange .....	85,86

# INDEX

Page

General .....	80
in Biology .....	77
in Chemistry .....	78
in Classics .....	67
in Commerce .....	73
in Drama .....	81
in Economics .....	73
in English .....	68
in French .....	70
in Geological Sciences .....	80
in German .....	71
in Greek .....	68
in Hebrew .....	71
in History .....	72
in Latin .....	67
in Mathematics .....	76
in Philosophy .....	73
in Physics .....	76
in Politics .....	73
in Psychology .....	73
in Public Speaking .....	81
in Spanish .....	72
Matriculation .....	67
Regulations governing .....	67
Undergraduate .....	67

## Science,

General Honours Course for Teachers in .....	113
--	-----

Interim High School Assistant's Certificate, Type A, in .....	113, 115
---	----------

Secondary School Graduation Diploma .....	47
---	----

Secondary School Graduation Diploma, Certificates equivalent to .....	50
--	----

Senate .....	14, 20
--------------	--------

Shell Oil Fellowship .....	88
----------------------------	----

Shortt, Adam, Scholarship in Political Science .....	73
--	----

Society of Chemical Industry, Prize of .....	79
--	----

Sociology .....	229
-----------------	-----

Sororities .....	44
------------------	----

## Spanish,

Courses of instruction in .....	243
---------------------------------	-----

# INDEX

	Page
Honours Course in .....	242
Scholarships in .....	72
Specialist Course in French and .....	112
Special examinations .....	103
Specialist Honours Courses .....	110,112,113
Specialized Honours Courses .....	108
Special students .....	99
Stadium, George Richardson Memorial .....	37
Stafford, Ann Eliza, Scholarship in Biology .....	77
Standing, Determination of .....	99,103
St. Andrew's Exchange Scholarship .....	85
Student Interests fee .....	64
Student self-government .....	44
Students' Memorial Union .....	40
Summer School,	
Admission to .....	53,62
Courses offered at .....	61,62
Examinations .....	63
Fees for .....	55,66
Prizes .....	97
Purpose of .....	62
Residence requirements .....	56
Scholarships .....	97
Supplemental examinations .....	58
Supplemental examinations,	
Centres for .....	59
Fees for .....	65
Taylor, George and Lilian Coleman Taylor Bursary .....	85
Taylor, Lilian Coleman, Prize .....	83
Teachers' Certificates,	
Commercial Specialist's .....	114
for graduates in Applied Science .....	114
High School .....	111
Inspectors' .....	116
Interim High School Assistant's .....	111,114
Permanent First Class .....	47,54,110
Theology, Combined Course in Arts and .....	119
Thesis for graduate work .....	121



# INDEX

Page

Timetable of lectures and laboratory work .....	9,10
Toronto Branch of the General Alumni Association Scholarship .....	80
Transfer from extramural to intramural classes .....	57
Trustees, Board of .....	13,17
Tutors .....	32
Tyrrell, J. B., Scholarship in Economic Geology .....	89
University Concert Series .....	38
University Council .....	13,19
University Naval Training Division .....	45
University Scholarships .....	80
University Women's Club of Kingston Bursary .....	83
Unmatriculated students, Admission of .....	52,54
Vaccination certificate .....	44
Veterans, Admission of .....	50,105
Wallace Prize .....	98
Walsh, Thomas M., M.A., Memorial Prize in History .....	73
Waterhouse, Edwin, Scholarship in Commerce .....	75
Welch Scholarship .....	85
Western Ontario Graduates Fellowship in History .....	90
Whig-Standard Essay Prize .....	97
Withdrawal of students .....	99,101
Women students, Information for .....	41
X-Ray chest survey .....	44

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